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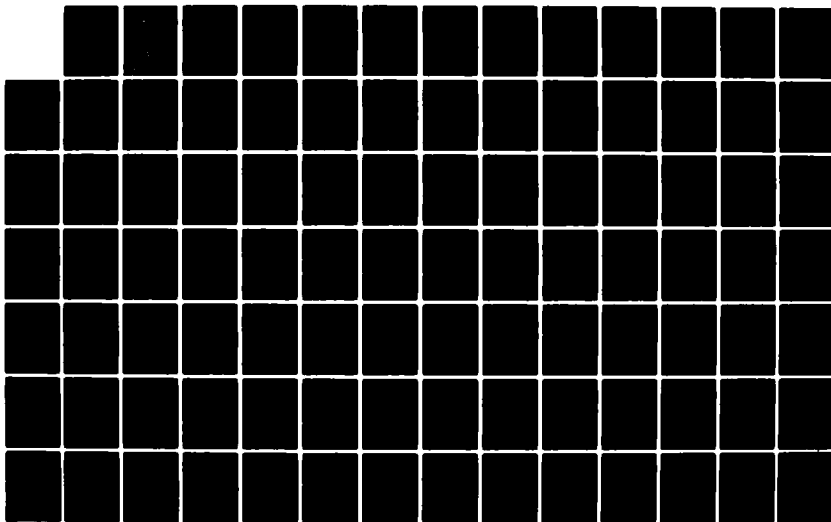
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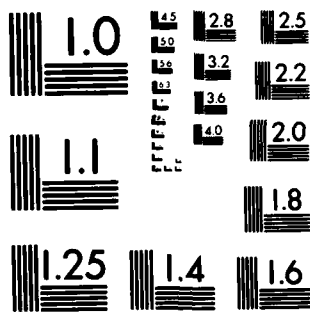
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Report for

The Assistant Secretary
of Defense

(Comptroller)

Pentagon, Washington, D.C.

December 5, 1983

**Survey Relating to the
Implementation of Cost/Schedule
Control Systems Criteria Within the
Department of Defense and Industry**

Phase I

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C/SCSC SURVEY

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SECTION I - EXECUTIVE SUMMARY

1.0 BACKGROUND

Since 1967, the Department of Defense (DOD) has required its contractors to have cost and schedule performance measurement systems that satisfy certain criteria. These criteria (contained in DODI 7000.2) are deemed necessary to monitor and control contract performance. The criteria, known as the Cost/Schedule Control Systems Criteria (C/SCSC), are applicable to selected contracts (that are not firm fixed-price) within programs designated as major system acquisitions. Over the years since 1967, controversies surrounding C/SCSC and associated reporting requirements have existed within industry and government. These controversies or issues can be categorized under two headings: (1) whether the costs of the criteria and associated reporting requirements outweigh their benefits and (2) concerns about the specifics of how these requirements have been implemented.

The Program Systems Management Company (PSMC) of Arthur D. Little, Inc. (ADL) assisted by its wholly owned subsidiary, Opinion Research Corporation (ORC), is currently under contract to the office of the Assistant Secretary of Defense (Comptroller) to conduct a survey. The purpose of the survey is to:

- Determine the degree of acceptance and use of the C/SCSC by defense contractors and government program managers;
- Identify problems and issues, the resolution of which could lead to improvements in the C/SCSC and contract performance measurement reporting requirements; and
- Recommend policy changes that will lead to these improvements and could be implemented by the Assistant Secretary of Defense (Comptroller).

The survey is to be accomplished in two phases -- the first phase being a mailed questionnaire and the second phase being in-depth interviews with DOD and industry respondents. The first phase was conducted in June 1983. This report contains the findings of Phase I, the highlights of which are contained in this Executive Summary.

2.0 SURVEY POPULATION

Four populations were surveyed: DOD Program Managers, Business Managers, Contractor Program Managers and Contractor Business Managers. Separate questionnaires were made for each group reflecting differences in the informational needs and perspectives of each group. The questionnaires were designed so that most questions could be answered by the respondents without reference to records and documents. We asked for perceptions and opinions.

Consequently, many of the survey results should be interpreted for what they are, namely, what the users think about C/SCSC and related reports. Depending upon the specific issue being examined, these perceptions may or may not be consistent with "the truth". Nevertheless, these perceptions constitute a "reality" with which DOD must contend.

The response rate to this survey exceeded all optimistic expectations -- over 80 percent of the eligible sample. As a consequence, the statistical confidence level one can place in the results approximates a census rather than a survey.

3.0 SURVEY FINDINGS HIGHLIGHTS

The most important finding of the survey was that the majority of respondents within each of the four populations believe that C/SCSC benefits to themselves outweigh its costs. However, the majorities were not large. They ranged from 53% to 62% in the four populations.

All in all, business managers have more favorable perceptions towards C/SCSC and its associated reports than do the program managers for whom they work. Also, for the most part, government managers appear to have more favorable perceptions than their contractor counterparts.

As to the usefulness of the reports generated by C/SCSC-accepted systems, close to four-out-of-five respondents rated the reports as being either good or excellent in helping to determine the cost status of their contracts.

However, for helping to determine aspects of contract status other than cost, less than half of the government program managers rated the reports as either good or excellent. Government business managers, on the other hand, considered these reports to be somewhat more helpful to them. More than half of the government business managers gave favorable ratings to the reports for estimates-at-completion, cost impacts of known problems, problem traceability, and schedule status. More than half of the contractor program managers rated the reports favorably with respect to estimates-at-completion and cost impacts of known problems. As to the timeliness of contractor reports, most government program managers are not satisfied, while most government business managers are satisfied.

Despite the low ratings of certain aspects of the reports and their lack of satisfaction with the timeliness of the reports, when government program managers were asked whether, if they had the choice, they would require their contractors to use C/SCSC-accepted systems "as is" or "with minor modifications", four-out-of-five government program managers said they would. A near equal proportion of contractor program managers said they would use their C/SCSC-accepted systems "as is" or "with minor modifications". However, in terms of using or requiring their C/SCSC-accepted systems "as is" (that is,

without any modifications at all), only one-out-of-five contractor program managers said they would do so, and only two-out-of-five government program managers said they would require their systems to be used "as is".

Because the various users of C/SCSC have somewhat different needs and perceptions, some of the controversies surrounding C/SCSC may not be as amenable to resolution as others. For example, the difference in needs between contractor and government managers was readily apparent from two findings solely related to the government evaluation process for contractor systems. More contractor business managers than not, feel that the benefits to their company of the review process are outweighed by the cost of the review process. On the other hand, government business managers are nearly unanimous in their belief that the review process is necessary to the proper functioning of the contractor's cost and schedule control system.

While firm conclusions concerning these and other findings of the survey must await in-depth interview results in Phase II, it appears that the C/SCSC approach to monitoring and controlling contract cost and schedule performance is perceived to be useful by most program and business managers in both DOD and industry. The results of this survey make clear that there is room for improvement in the application of C/SCSC, as observed by the participants and users. In addition, although there may be differences in needs between government and contractor managers, the results also appear to indicate that C/SCSC represents a valid concept and approach and the information derived from C/SCSC-accepted systems is accepted and used.

The body of this report contains detailed information on attitudes and perceptions concerning C/SCSC by both DOD and industry officials. Many of these findings are suggestive of directions for improvement in C/SCSC policies and practices which will be explored in Phase II of this contract. By its very nature, a survey of this type only quantifies -- not resolves -- differences of opinion concerning matters ranging from the basic utility of C/SCSC in controlling acquisition cost and schedule performance to the specific details of implementation.

SECTION II - SURVEY INTRODUCTION

1.0 C/SCSC AND SURVEY BACKGROUND

DODI 7000.2 and the Cost/Schedule Control Systems Criteria (C/SCSC) were introduced in 1967 to ensure that cost/schedule planning and control systems employed by contractors were fully integrated, measured contract performance objectively, and provided reliable and meaningful data that were derived from a single data base. Under the C/SCSC approach, contractors have been encouraged to develop planning and control systems suited to their own needs, but which satisfy DOD's requirements and need for management information and visibility.

An objective of the C/SCSC is to provide an adequate basis for responsible decision-making by both contractor management and DOD components. To achieve this objective, contractors' internal management control systems must provide data which (1) indicate work progress, (2) properly relate cost, schedule and technical accomplishment, (3) are valid, timely and auditable, and (4) supply DOD managers with information at a practicable level of summarization.

Contractors' systems which comply with the criteria of DODI 7000.2 normally provide these summarized data to the government in the five formats of the Cost Performance Reports (CPR) prescribed in DODI 7000.10. The CPR provides (1) contract cost/schedule status information for use in making and validating management decisions, (2) early indicators of contract cost/schedule problems, and (3) effects of management actions taken to resolve problems affecting cost/schedule performance.

Since 1967 DODI 7000.2 has been a requirement on major acquisition programs. More than 200 contractor systems have been reviewed and found acceptable. The DOD and the services have attempted to enhance and strengthen C/SCSC implementation during this period. Activities and actions have included: a continuing dialogue with contractors through industry associations (e.g., NSIA, EIA, AIA, etc.); joint government/industry working groups; establishment of the Performance Measurement Joint Executive Group (PMJEG), composed of the C/SCSC focal points for each service; introduction of the C/SCSC Joint Implementation Guide, the Joint Surveillance Guide and the Subsequent Application Review Program; revisions to DODI 7000.2 and to the C/SCSC Joint Implementation Guide.

During the period there has also been controversy as to the value and usefulness of these government requirements. Examples of such controversies include:

- Common understanding of C/SCSC requirements by industry and government;
- Common understanding of criteria interpretation by government review teams and industrial contractors;
- Degree of documentation requirements, including depth of reporting; and

- Effectiveness of the use of the information being produced by accepted systems.

Such controversies tend to focus on the subject of the management prerogatives of DOD and of industry; and elicit emotion and produce confusion concerning the acceptance and use of C/SCSC.

The Assistant Secretary of Defense (Comptroller) determined that a need existed to conduct a survey to identify the degree of acceptance and use of C/SCSC by defense contractors and government program managers. Previous surveys and studies had been made regarding C/SCSC implementation; however, none had been conducted by a professional and independent opinion research firm.

A contract was awarded to Arthur D. Little, Inc. (ADL) in September 1982 to conduct research entitled "Survey Relating to the Implementation of Cost/Schedule Control Systems Criteria (C/SCSC) within the Department of Defense and Industry." Management of the survey is the responsibility of ADL's Program Systems Management Company (PSMC). PSMC is being assisted by Opinion Research Corporation, a wholly owned subsidiary of ADL. The major purposes of the survey are to:

- Determine the degree of acceptance and use of the C/SCSC by defense contractors and government program managers;
- Identify problems and issues, the resolution of which could lead to improvements in the C/SCSC and contract performance measurement reporting requirements; and
- Recommend policy changes that will lead to these improvements and could be implemented by the Assistant Secretary of Defense (Comptroller).

2.0 SURVEY APPROACH AND TASKS

The survey is being conducted in two phases. Phase I addressed the entire population of defense contractor and DOD program managers through the use of questionnaires. This respondent population included all DOD programs which had a C/SCSC requirement and contractors with accepted systems. The results of the Phase I effort are the subject of this report. Phase II will focus on in-depth interviews with a selected sample of defense contractor and DOD program managers. The following tasks were performed in Phase I:

- Identification of the major C/SCSC and contract cost performance reporting related issues.
- Design, sample testing, and completion of the questionnaires based on these major issues; development of procedures for conducting the survey; and identification of industry and DOD program manager respondents.

- Administration of the survey process. This included mailing of the questionnaires to identified defense contractor and DOD program managers, and follow-up actions for non-respondents.
- Analysis of respondent data in the context of the major issues identified.
- Preparation of this Phase I Final Report. This included developing the Phase I conclusions, and developing recommendations relating to the in-depth surveys to be conducted during Phase II.

3.0 SURVEY ACTIVITIES

3.1 Initial Research and Issue Identification

The initial research included interviews with government and industry spokespersons and the review of previous studies and surveys. The interviews included representatives of:

- Assistant Secretary of Defense (Comptroller);
- DOD Performance Measurement Joint Executive Group (PMJEG);
- Defense Logistics Agency;
- Defense Contract Audit Agency;
- Defense Systems Management College;
- Sample of Army, Navy and Air Force government and contractor program managers; and
- Industry spokespersons recommended by NSIA Management Systems Subcommittee.

Identification and definition of major C/SCSC and contract cost reporting related issues were derived from the interviews held with industry and government spokespersons. The results of these interviews produced a list of issues and concerns which were then grouped into seven (7) major areas for investigation. These areas of investigation along with their associated issues or concerns became the framework for survey design and subsequent questionnaires.

The following lists and briefly describes the seven (7) major areas of investigation.

(1) Do the benefits of C/SCSC outweigh its costs?

This issue has been the subject of long-standing controversy. One obvious difficulty in resolving the controversy is the determination of the incremental cost between operation of a C/SCSC-compliant system and the

operation of a system the contractor would otherwise use. Information about the cost of the latter alternative is not normally available. Therefore, we dealt with this specific item as a matter of respondent perceptions. However, we also included other related items of concern within this issue. The specific items investigated were:

- The benefits and effectiveness of C/SCSC.
- The accuracy of information and usefulness of products.
- Cost versus benefit.
- Choice of whether to use C/SCSC.
- Cost of operation.

(2) Are the criteria concept, approach and the criteria themselves appropriate; and are DOD practices effective?

The criteria approach, taken since 1967, was a departure from previous types of requirements. It established a set of criteria for management systems, rather than specifying a specific system. One of the purposes, for either alternative, would be to ensure that the government program office would have an adequate basis for keeping informed on the cost and schedule status of its contract.

This concern was examined in the context of its appropriateness, adequacy and acceptability as follows:

- Validity of using a criteria concept.
- Appropriateness of currently delineated criteria.
- Approach of ensuring system adequacy.
- Effectiveness of DOD practices.

(3) Is the Government Review Process Effective?

A DOD responsibility in managing the acquisition of major systems is to ensure that visibility of contractor's progress is sufficient to reliably indicate the results being obtained. The C/SCSC review process is intended to help assure this visibility. This issue addresses various elements of the government review process including both Demonstration Reviews and Subsequent Application Reviews (SARs). The following specific concerns were examined.

- Organizations participating on the review teams.
- Need for participation in the review process.
- Duration of reviews.
- Size of review teams.

- Number of discrepancies or corrective action items.
- Perceptions of review team performance.
- Cost attributable to the review process.
- Cost versus benefit of the review process.
- Need for the review process.

(4) Are C/SCSC consistently interpreted?

Contractors have indicated that interpretation of C/SCSC varies among DOD review teams. This concern was investigated.

(5) Are the time allowances for certain key C/SCSC actions realistic?

This issue is concerned with the elapsed time after contract award until the contractor establishes the performance measurement baseline and until the Demonstration Review or Subsequent Application Review (SAR) is held. The issue addressed the following concerns.

- Time actually used to establish performance measurement baseline.
- Effect of undefinitized contracts on establishing the baseline.
- Earliest reasonable time to establish the baseline.
- Elapsed time after contract award until conduct of C/SCSC review.

(6) Are Cost Performance Reports and Internal Contractor Cost/Schedule Data Timely and Useful?

Contractors have contended that the government asks for more reports (depth and volume) than needed and that the government doesn't always use what it receives. The government program managers often contend that the Cost Performance Reports (CPRs) are received too late after the period reported and that they must frequently resort to other more timely sources. The following concerns were addressed.

- Depth of Cost Performance Report data.
- Volume of internal contractor reports.
- Timeliness of Cost Performance Reports
- Timeliness of internal contractor cost/schedule reports.
- Cost Performance Report use.
- Contractor use of internal cost/schedule reports.

(7) Is government C/SCSC surveillance by agencies having contractor plant cognizance effective in ensuring that the contractor's system continues to operate as accepted?

The government program offices are dependent upon government plant representatives for C/SCSC surveillance. In the interviews held at the outset of this survey, concerns were voiced about the following factors, which were examined.

- Surveillance effectiveness.
- Frequency of contact with the contractors.
- In-plant priority and expertise.

3.2 Selection of Respondents and Questionnaire Development

Results of the interviews indicated that survey respondents should be the government and contractor program managers and their respective business managers. The seven (7) areas of investigation and their associated issues or concerns, presented in paragraph 3.1, were used for the design of the four (4) questionnaires. Draft questionnaires were developed and field tested with two government program offices and three industrial contractors. Revisions were made as a result of the field testing. The final questionnaires and survey procedures were approved by OMB. Copies of the four (4) questionnaires and the completion instructions are included in Appendix 1.

The number of questions contained in each of the questionnaires was:

Government Program Manager	22
Contractor Program Manager	27
Government Business Manager	33
Contractor Business Manager	37

All questions were multiple choice except for the final question on each questionnaire. The final question was optional and open-ended. It provided for the respondent's thoughts on any aspect of C/SCSC.

Program manager questionnaires contained questions of a general nature which could be completed quickly and would not require reference to any other material. Business manager questionnaires required responses at a more specific level of detail and related to one specific contract. The contract was selected based on specific criteria contained in the instructions that accompanied the questionnaires. Each contractor business manager could select only one contract for the program and each government business manager could select only one contract for each contractor.

3.3 Respondent Population

The survey required that data be collected from both industrial contractors and government program offices. At the time of the survey, there were 135 DOD programs that had C/SCSC requirements. This entire universe was surveyed.

Contract lists, with the names and addresses of contractor and government program managers were provided by ODASD (Cost & Audit). The total population or eligible sample was:

TABLE II-1
ELIGIBLE SAMPLE

Questionnaire	Military Department			Total Eligible Sample No.
	Army No.	Navy No.	Air Force No.	
Government Program Manager	28	43	64	135
Government Business Manager	48	64	78	190
Contractor Program Manager	42	63	65	170
Contractor Business Manager	42	63	65	170
Totals	160	233	272	665

The numerical values in this table show the number of program managers and business managers in the eligible sample.

3.4 Survey Procedures

Using the respondent lists, survey packets were mailed from Opinion Research Corporation's (ORC) mail center in Princeton, New Jersey to each contractor and government program manager. Each packet contained a cover letter explaining the purpose of the survey, the need for the data, and brief instructions (See Appendix 1). The packets were mailed on June 9, 1983. The requested return date was June 24, 1983.

In order to enhance respondent cooperation, the cover letter was signed by the Deputy Secretary of Defense. The packet also contained the survey questionnaire in a booklet format and a postage-paid pre-addressed envelope to ORC to facilitate its return. In addition, the confidentiality with which the information would be treated was strongly emphasized.

Two follow-up procedures were used to further enhance the response rate. Approximately five to seven days after the initial mailing, reminder cards were sent to all program managers. In addition, approximately three weeks following the initial mailing, we contacted program managers by telephone who had not responded to remind them of the survey and solicit their cooperation.

4.0 RESPONSE RATE

The response rate for each of the four (4) questionnaires is shown by military service in the following tabulation.

TABLE II-2
RESPONSE RATE

Questionnaire	Military Department			OVERALL
	Army %	Navy %	Air Force %	
Government Program Manager	100	74	80	83
Government Business Manager	75	69	87	79
Contractor Program Manager	93	81	86	86
Contractor Business Manager	83	83	91	86
OVERALL	87	77	86	83

The numerical values in this table show the percent, for each category in the eligible sample, that responded to their questionnaire.

The number of respondent questionnaires used for the data tabulations discussed in Section III was 534, or 80% of the eligible sample (665 questionnaires). The overall response rate shown in Table II-2 includes 18 additional questionnaires. Of these 18 questionnaires, nine (9) responses were comments only (i.e., responses solely to the open-ended question) and nine (9) were received after tabulations of the respondent questionnaires were completed.

The high overall response rate provides a virtual census of the population. In part at least, this high response rate may be strong evidence of interest and concern. An advantage of having this high response rate is that the results closely represent the views of the total population, rather than representing inferences regarding their views.

5.0 ANALYSIS STRUCTURE

The Issue/Respondent/Question Matrix presented in Figure 1 was used as a guide for the analysis presented in Section III of this report. This matrix shows the issues and sub-issues on the vertical axis, the four (4) questionnaires on the horizontal axis, and the individual question numbers within each cell of the matrix.

Complete tabulations of the responses to each of the questions in each of the questionnaires are included in Appendix 2. Cross-tabulation of responses between questions and statistical tests were accomplished on a selected basis.

ISSUE/RESPONDENT/QUESTION MATRIX

I S S U E S	QUESTIONNAIRES			
	Program Managers		Business Managers	
	Government	Contractor	Government	Contractor
1.0 <u>C/SCSC Cost/Benefit</u>				
Benefits & Effectiveness	13	17,22	26	
Accuracy & Usefulness	7	23,7	25,28	22
Cost vs. Benefit	16	20	31	31
Choice of Use	5	5,9,10,12,13		
Cost of Operation				26
2.0 <u>Criteria Concept</u>				
Validity of Concept	10	14		32
Criteria Appropriateness	12	16	27	34
Ensure System Adequacy	11	15		33
DoD Practices	14	18	29	30
3.0 <u>C/SCSC Review Process</u>				
Participation			12b,12c	11b
Participation Need			14a,b,c,d,e	
Duration			12d	11c
Team Size			12e	11d
System Deficiencies			12f	11e
Team Performance				11f
Cost				12
Cost vs. Benefit				13
Need for Reviews			15	
4.0 <u>Consistency of Interpretation</u>				11g
5.0 <u>Implement. Time Allowances</u>				
Actual Time Used for Baseline			10	10
Earliest Reasonable Time			11	
Elapsed Time to Review			12a	11a,14
6.0 <u>Performance Reporting</u>				
Depth of Data			16,17,19,20,21	16,17,19
Internal Reports				20,21
Timeliness of CPRs	15		22,30	25
Timeliness Internal Reports		19		24,29
CPR Use	6,8,9		18,23,24	18
Internal Report Use		6,8		23,36
7.0 <u>Surveillance</u>				
Effectiveness	17		32	
Frequency				35
Expertise & Priority				28,27
Questions relating to population descriptors	1,2,3,4,18,19,20,21	1,2,3,4,21,24,25,26	1,2,3,4,5,6,7,8,9,13	1,2,3,4,5,6,7,8,9,15
Questions soliciting comments	22	27	33	37

Figure 1

SECTION III - ANALYSIS OF SURVEY RESULTS

INTRODUCTION

This section presents the detailed analysis of the responses to the questionnaires. It is organized by the seven (7) major areas of investigation outlined in Section II, paragraph 3.1.

For cross-referencing to source data, this analysis contains abbreviated references to the appropriate questionnaire and specific question number. The questionnaire references are to GPM, GBM, CPM and CBM. These abbreviations refer to the questionnaires for Government Program Managers, Government Business Managers, Contractor Program Managers and Contractor Business Managers, respectively. For example, CBM-21 means Contractor Business Manager questionnaire, question number 21.

For an overview of how each question was used in relation to the seven (7) areas of investigation, refer to Figure 1, Issue/Respondent/Question Matrix, contained in Section II.

In addition to the questions which directly relate to the major areas of investigation, there were questions included in the questionnaires that provided respondent profiles. The summary of these responses is contained in Appendix 3. These data should provide the reader with a better understanding of the respondent population. Some of the data in the appendix were also useful in cross-tabulations with responses to questions in this section. These cross-tabulations, or relevant discussion, are included in the detailed analysis related to the area of investigation, as appropriate.

Complete comparative tabulations are included in Appendix 2.

1.0 COST AND BENEFIT

1.1 Background

The cost versus benefit of C/SCSC has been a long standing concern. Unfortunately, objective and quantifiable data to assess costs and benefits are not available. While we may approximate the cost of operating a cost/schedule control system that is compliant with C/SCSC (as we have attempted to do), we do not know the cost of operating the same system (all other things being equal) without a C/SCSC requirement. As in many other areas, we assessed the perceptions of program managers and business managers, both contractor and government. Within their organizations, these people are "closest" to the actual application of C/SCSC requirements. They should therefore have a reasonably clear understanding of program resources/costs associated with C/SCSC applications. These managers are also intended to be the prime benefactors of C/SCSC-related disciplines and information. As a result, we assume that their perceptions will be a reasonable next-best substitute for the hard data that are not available.

1.2 Overview of Related Questions

Under the overall concern of cost versus benefit, we have included the questions which directly address perceptions or evaluations in four (4) areas:

- Perceptions bearing solely on the benefits and effectiveness of C/SCSC.
- Perceptions related to the validity of information produced from C/SCSC-accepted systems, including both Cost Performance Reports for the government-customer and internal data for the contractor.
- Perceptions of whether benefits outweigh costs. This includes whether C/SCSC would be used, if managers had a choice.
- Assessment of the manpower cost in operating C/SCSC-accepted systems; and cross-tabulation of this cost with how the cost versus benefit question was answered.

1.3 Results

1.3.1 Benefits and Effectiveness of C/SCSC

The benefits or effectiveness of C/SCSC can be viewed as a subject in itself, without attempting to relate C/SCSC to "costs". This will be discussed first.

Government and contractor program managers were asked whether they agreed (agree strongly, agree somewhat, disagree somewhat, disagree strongly, or neither agree nor disagree) that a major benefit of C/SCSC is that it forces a contractor to do planning that otherwise would not have been accomplished as thoroughly (GPM-13 and CPM-17). Contractor program managers were also asked how effective (very effective, somewhat effective, not too effective, or not

at all effective) their C/SCSC-accepted system was in assisting them to keep their program on schedule and within cost (CPM-22). Government business managers were asked if they agreed (agree strongly, agree somewhat, disagree somewhat, disagree strongly, or neither agree nor disagree) that their contractor's cost and schedule control systems were effective in helping management control contract performance (GBM-26). The results are displayed in Table 1.1.

TABLE 1.1
BENEFITS AND EFFECTIVENESS OF C/SCSC

Statement	Government		Contractor
	Prog. Mgr.	Bus. Mgr.	Prog. Mgr.
	%	%	%
A Major Benefit of C/SCSC is More Thorough Planning	77	*	74
Contractor's System is Effective	*	80	71

The numerical values in this table show: the percent of program managers who agreed that a major benefit of C/SCSC is more thorough planning; the percent of contractor program managers who felt their system was effective; and the percent of government business managers who agreed that their contractor's system was effective.

* Not asked.

Most government and contractor program managers perceived that a major benefit of C/SCSC is more thorough contractor planning than otherwise would be accomplished (77% for government program managers and 74% for contractor program managers).

Most contractor program managers (71%) also evaluated their C/SCSC-accepted systems as being effective in assisting them and their staffs for keeping the program on schedule and within cost limits. Most government business managers also agreed (80%) that contractor's cost and schedule control systems are effective in helping management to control contract performance.

It appears clear from these data that a major perceived benefit of C/SCSC is more thorough planning. It also appears clear that C/SCSC-accepted systems

are considered to be effective by a large majority of the respondents (71% for contractor program managers and 80% for government business managers).

1.3.2 Accuracy of Information and Usefulness of Products.

Since the Cost Performance Report (CPR) and internal contractor reports are the useable products of C/SCSC-accepted systems, perceptions regarding the usefulness of these products and the accuracy or validity of the information they contain should also be an indicator of C/SCSC effectiveness.

With this in mind, contractor program and business managers were asked how accurate (very accurate, somewhat accurate, not too accurate, or not at all accurate) the CPR was in portraying contract cost and schedule status (CPM-23 and CBM-22). Government business managers were asked whether they agreed (agree strongly, agree somewhat, disagree somewhat, disagree strongly, or neither agree nor disagree) that the contractor's internal data gives the program office valid information at a practicable level of summarization (GBM-28). The results are shown in Table 1.2.

TABLE 1.2
ACCURACY OF COST/SCHEDULE INFORMATION

Statement	Government	Contractor	
	Bus. Mgr.	Prog. Mgr.	Bus. Mgr.
	%	%	%
CPR is accurate	*	91	92
Contractor's internal data is valid	80	*	*

The numerical values in the table show the percent of contractor respondents who felt that the CPR is accurate; and the percent of government business managers who agreed that the contractor's internal data is valid.

* Not asked.

Most of the contractor program and business managers (over 90%) responded that their CPRs are accurate. Forty percent (40%) of the program managers and 45% of the business managers responded that their CPRs were very accurate.

Most government business managers (80%) also agreed that the contractor's internal data for their contract gives the program office valid information at a practicable level of summarization.

It appears clear from these responses that the information produced from C/SCSC-accepted systems is considered to be fairly accurate or valid by their users.

To assess the usefulness of the products, government program and business managers were asked to rate (excellent, good, fair, poor, or no opinion) the CPRs they receive in terms of how well they help in determining several items of contract-related status. Contractor program managers were similarly asked to rate their internal reports. The items are listed in Table 1.3 in terms of the percentage of managers who responded favorably (i.e., rated the item as either excellent or good). They are listed generally in the order of the determinations that are believed to be helped the most (GPM-7, GBM-25 and CPM-7).

TABLE 1.3
USEFULNESS OF REPORTS

Contract-Related Status	Government		Contractor
	Prog. Mgr. (CPR)	Bus. Mgr. (CPR)	Prog. Mgr. (Int'l Reports)
	%	%	%
Cost Status	74	83	79
Estimates-at-Completion	49	66	55
Cost Impacts of Known Problems	41	60	51
Problem Traceability	31	55	50
Schedule Status	38	51	47
Problem Areas Not Previously Recognized	21	36	28

The numerical values in this table indicate the percent of respondents that rated the reports (CPR or internal) as either "excellent" or "good" in terms of how well they helped determine the contract-related status shown.

How much these products help the managers depends on what they are to be used for and which manager the user is. Clearly, for the items rated, the reports are felt to be most helpful in determining cost status and estimates-at-completion. Fifty percent (50%) or more of both the government business managers and contractor program managers also rated the reports as being "excellent" or "good" in determining cost impacts of known problems and for providing the capability of tracing problems to their sources. On the other hand, these reports are rated as being less helpful in determining schedule status or in identifying problem areas not previously known.

The data appear to suggest that these reports are more helpful to government business managers and contractor program managers than to government program managers. The differences between the government program and business managers should not be unexpected. The CPR is more directly related to the specific responsibilities of the government business manager. The business manager normally performs the CPR-related work on behalf of the program manager. To explain the difference between the government and contractor program managers, it should be kept in mind that the question asked of the contractor program manager was related to internal reports while the question for the government program manager was related to the CPR.

1.3.3 Cost Versus Benefit

The contractor managers were asked whether they agreed (agree strongly, agree somewhat, disagree somewhat, disagree strongly, or neither agree nor disagree) that the costs to their company (and to DOD), in terms of time and manpower to operate the C/SCSC-accepted system, are outweighed by the benefits to them in managing the contract (CPM-20 and CBM-31).

The government managers were asked whether they agreed (agree strongly, agree somewhat, disagree somewhat, disagree strongly, or neither agree nor disagree) that the costs to their program office, in terms of time and manpower for all C/SCSC-related activities, are outweighed by the benefits to them in managing the contract (GPM-16 and GBM-31).

The results are presented in Table 1.4.

TABLE 1.4
COST VERSUS BENEFIT

<u>Benefits Outweigh Costs</u>	<u>Contractor</u>		<u>Government</u>	
	<u>Prog. Mgr.</u>	<u>Bus. Mgr.</u>	<u>Prog. Mgr.</u>	<u>Bus. Mgr.</u>
	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>
Agree	53	55	59	62
Disagree	43	43	36	35
Neither Agree nor Disagree	4	2	5	3

The numerical values in this table indicate the percent of respondents who agreed or disagreed with the statement that the benefits of C/SCSC outweigh its costs. For contractors, the responses related to their company. For the government, the responses related to their program office.

While all four categories of managers agreed that benefits to themselves outweighed their costs, this agreement appears to be slightly higher within government managers than contractor managers; and slightly higher within business managers than program managers.

1.3.4 Choice of Whether to Use C/SCSC

An indicator of cost versus benefit evaluation is whether program managers would use C/SCSC, when given a choice.

1.3.4.1 Current Contract Requirements

Contractor program managers were asked whether they would use their C/SCSC-accepted system (if they had the choice); and government program managers were asked whether they would require their contractors to use their C/SCSC-accepted systems (if they had the choice) (CPM-5 and GPM-5). The options and responses were essentially:

- Continue to use (require) the C/SCSC-accepted system as currently operating -- contractor 21% (government 39%)
- Use (require) the current system with minor modifications -- contractor 57% (government 41%)

- Use (require) the current system with major modifications; or not use (require) the system at all -- contractor 22% (government 20%)

These results are consolidated in Table 1.5.

TABLE 1.5
CHOICE OF WHETHER TO USE C/SCSC

<u>Use (Contractor) or Require (Government) the C/SCSC-Accepted System</u>	<u>Contractor Prog. Mgr. (Use) %</u>	<u>Government Prog. Mgr. (Require) %</u>
As Is	21	39
Minor Modifications	57	41
Major Modifications or Not At All	22	20
TOTAL	100	100

For contractor managers, the numerical values in the table indicate the percent of respondents that would use their C/SCSC-accepted systems, if given the choice. For government managers, it is the percent of respondents that would require their contractors to use a C/SCSC-accepted system, if given the choice.

It appears clear that more government program managers (39%) than contractor program managers (21%) prefer that C/SCSC-accepted systems be used as is. It is also clear that the great majority of both government program managers (80%) and contractor program managers (78%) do not perceive that major modifications to accepted systems are needed. However, a plurality of government program managers (41%) and a majority of contractor program managers (57%) perceive the need for at least some minor modifications.

1.3.4.2 Other DOD Contracts and Commercial Work

Also related to contractor "choice" and its impact on the issue of cost versus benefit, contractor program managers were asked how often their companies used their C/SCSC-accepted systems on DOD contracts when C/SCSC was not a contractual requirement (CPM-9). They were additionally asked how often their companies used their C/SCSC-accepted system on commercial work (CPM-12).

For use on other DOD contracts, 122 program managers indicated they could answer (19 of the 141 respondents marked "Don't know"). Seventy (70) respondents also indicated that their companies had commercial work. Of these 70 respondents, 44 program managers indicated they could answer regarding commercial work (26 of the 70 respondents marked "Don't know"). The results are presented in Table 1.6.

TABLE 1.6
USE OF C/SCSC WHEN NOT REQUIRED

<u>Use of C/SCSC- Accepted System</u>	<u>For Other DOD Contracts</u>	<u>For Commercial Work</u>
	<u>%</u>	<u>%</u>
All of the Time	22	11
Some of the Time	53	25
Never	25	64
<u>TOTALS</u>	<u>100</u>	<u>100</u>

This table shows responses of contractor program managers. It indicates how often their companies use their C/SCSC-accepted systems, when C/SCSC is not a contractual requirement. Note that the base "For Other DOD Contracts" is 122 program managers; and the base "For Commercial Work" is 44 program managers.

Questions were also asked regarding how often contractors used an internally tailored earned-value system when earned-value was not a contractual requirement (CPM-10 and CPM-13). One-hundred eighteen (118) contractor program managers answered regarding DOD contracts, and 41 contractor program managers answered regarding commercial work. These data are shown in Table 1.7.

TABLE 1.7

USE OF INTERNALLY TAILORED EARNED-VALUE SYSTEMS

<u>Use of Internally Tailored Earned- Value System</u>	<u>For Other DOD Contracts</u>	<u>For Commercial Work</u>
	<u>%</u>	<u>%</u>
All of the Time	28	22
Some of the Time	58	44
Never	14	34
TOTALS	100	100

This table shows responses of contractor program managers. It indicates how often their companies used internally tailored earned-value systems, when such systems were not a contractual requirement. Note that the base "For Other DOD Contracts" is 118 program managers; and the base "For Commercial Work" is 41 program managers.

For contractors with C/SCSC-accepted systems and the capability for internally tailored earned-value systems: The data in Tables 1.6 and 1.7 suggest that when given their own choice of whether to use either capability or neither capability, a greater percentage will use one of these systems on DOD contracts than on commercial work. For both DOD and commercial work, the data also suggest that a greater percentage will use an internally tailored earned-value system than their C/SCSC-accepted system.

We assume that cost versus benefit is a key consideration in these cases. For those contractors that use their C/SCSC-accepted systems when not required, they perceive the benefits as outweighing the costs. For those contractors that do not use their C/SCSC-accepted system when given the choice, the costs would outweigh the benefits. Note that 22% of the program managers responded that their company always used its C/SCSC-accepted system on DOD work and 11% responded that their company always used it on commercial work. They would fit the first case of perceived benefits outweighing the costs. However, 25% of the program managers responded that their company never used its C/SCSC-accepted system on DOD work and 64% responded that their company never used it on commercial work. They would fit the second case where costs would outweigh benefits.

1.3.5 Cost of Operation

Contractor business managers were asked to approximate the total number of

employee man-years per year (i.e., cost) spent on operating their C/SCSC-accepted system for their contract (CBM-26).

It must be emphasized that this should not be interpreted as a "delta" cost that could be attributable solely to the C/SCSC requirement. It is an approximation of the cost of operation for an ongoing system that has been accepted by the DOD as being compliant with C/SCSC. If C/SCSC would not have been a contract requirement, the contractor would still have operated "some" cost/schedule control system, with costs attributable to that operation.

This cost of operation was also considered separate from costs that might be associated with the C/SCSC review process (CBM-12). Costs related solely to the review process are discussed in another section of the report.

The specific question (CBM-26) was:

"Approximately how many man-years per year of all categories of employees are spent on operating your C/SCSC-accepted system for this contract and analyzing its output?"

The responses are summarized in Table 1.8.

TABLE 1.8
COST OF OPERATION

<u>Cost of Operation of</u> <u>C/SCSC-Accepted System</u> <u>Man-Years Per Year</u>	<u>Contractor</u> <u>Bus. Mgr.</u> <u>%</u>
0 - 5	18
6 - 10	28
11 - 15	21
16 - 20	9
21 - 30	11
31 or More	13
<hr/> TOTAL	<hr/> 100

The responses in this table represent the approximations provided by 114 contractor business managers. The remaining 22 contractor business managers whose responses were tabulated for this question selected the response: "Don't know, too difficult to estimate."

For the 114 contractor business managers who provided approximations of cost (Table 1.8), eighteen percent (18%) approximated that the cost of operation was 5 man-years per year, or less. Nearly one-half (46%) of these respondents indicated a cost of 10 man-years per year, or less. Approximately two-thirds (67%) of these respondents indicated a cost of 15 man-years per year, or less; and approximately three-quarters (76%) of these respondents indicated a cost of 20 man-years per year, or less.

These responses (for cost of operation) were cross-tabulated with the contractor business manager responses which contained the approximate dollar value of the contract (CBM-5). The results are shown in Table 1.9 for the three (3) contract dollar value ranges of: Less Than \$40 Million; \$40-160 Million; and \$160 Million or more. The "break" points of \$40 million and \$160 million were selected based solely on their significance to C/SCSC within the Military Departments. At the time of the survey, C/SCSC was normally a mandatory requirement within the departments for cost-type and fixed-price incentive contracts which were valued at \$40 million or more for Research and Development work and \$160 million or more for Production work.

TABLE 1.9
COST OF OPERATION VERSUS CONTRACT VALUE

Cost of Operation of C/SCSC-Accepted System Man-Years Per Year	Contract Dollar Value (Millions)						Overall
	At	Less	At	Less	At	Less	
	Least	Than	Least	Than	Least	Than	
	-	\$40	\$40	\$160	\$160	-	
	%		%		%		%
0 - 5	50		18		7		18
6 - 10	30		40		20		28
11 - 15	20		26		18		21
16 - 20	-		3		16		9
21 - 30	-		8		16		11
31 or More	-		5		23		13
TOTAL	100		100		100		100

The numerical values in this table show a cross-tabulation of responses by contractor business managers. The cross-tabulation shows the approximated cost of operation for C/SCSC-accepted systems (Table 1.8) within each of three (3) contract dollar value ranges.

As should be anticipated, the data in Table 1.9 appears to show that the cost of system operation is relatively elastic in relation to contract dollar value, with lower costs associated with lower dollar value contracts, and vice versa. For example, 50% of the respondents with contract values of less than \$40 million indicated their cost of operation as 5 man-years per year, or less. For contracts of at least \$40 million but less than \$160 million, the percent of respondents who indicated the same cost of operation (5 man-years per year, or less) dropped to 18%; while for contracts of \$160 million or more, the percent of respondents was 7% for a cost of operation of 5 man-years per year, or less. Alternatively, only 20% of the respondents with contract values of less than \$40 million indicated the cost of system operation as 11 man-years per year or more; while the percent of respondents indicating 11 man-years per year or more increased to 42% for contracts in the \$40-\$160 million range and to 73% for contracts of \$160 million or more.

The responses to cost of operation were also cross-tabulated with the contractor business manager responses for cost versus benefit (CBM-31). The results of this cross-tabulation are shown in Table 1.10.

TABLE 1.10
COST OF OPERATION VERSUS COST/BENEFIT

<u>Cost of Operation</u> <u>of C/SCSC-Accepted</u> <u>System</u> <u>Man-Years Per Year</u>	<u>Benefits Outweigh Costs</u>			<u>Total</u> <u>%</u>
	<u>Agree</u>	<u>Disagree</u>	<u>Neither Agree</u> <u>Nor Disagree</u>	
	<u>%</u>	<u>%</u>	<u>%</u>	
0 - 5	71	29	0	100
6 - 10	63	34	3	100
11 - 15	50	50	0	100
16 or More	41	59	0	100
Don't Know	59	36	5	100
Overall	55	43	2	100

The numerical values in this table show a cross-tabulation of responses by contractor business managers. The cross-tabulation shows the approximated cost of operation for C/SCSC-accepted systems (Table 1.8) with whether the respondent agreed or disagreed that benefits of the system outweighed its costs (Table 1.4).

The pattern of the data in Table 1.10 appears to suggest that perceptions of whether benefits outweigh costs are relatively elastic and inversely related to the cost of system operation (i.e., the higher the approximated cost of operation for a contractor's system, the lower the agreement by that contractor business manager that benefits outweigh costs).

For example, when the cost of system operation was approximated as 0-5 man-years per year (the lowest cost-range shown in the table), 71% of the contractor business managers agreed that benefits outweighed costs. But when the cost was identified as 16 or more man-years per year (the highest cost-range shown in the table), only 41% of the business managers agreed that benefits outweighed costs. (Overall agreement that benefits outweighed costs, as shown in this table and previously shown for contractor business managers in Table 1.4, was 55%.)

This pattern appears consistent with expectations.

1.4 Summary

Based on the respondent data, we conclude that:

- C/SCSC-accepted systems are considered to be effective by a large majority of the respondents (contractor program and government business managers). A large majority of contractor and government program managers perceive that a major benefit of C/SCSC is more thorough contractor planning than otherwise would be accomplished.
- CPRs and related internal contractor reports are considered to be fairly accurate or valid by their users. The reports are considered to be most helpful in determining contract cost status. They are also helpful to government business managers and contractor program managers for estimates-at-completion, determining cost impacts of known problems, and tracing problems to their sources, in that order. They are not as helpful, however, in these areas to government program managers.
- All four categories of managers agreed that C/SCSC benefits to themselves outweighed its associated costs. However, the strength of this belief was less than that relating solely to C/SCSC effectiveness. When program managers are given the choice of whether they would require or use current C/SCSC-accepted systems as is, or with some modification, more government program managers than contractor program managers would require or use these systems as is. Nevertheless, a plurality of government program managers and a majority of contractor program managers perceive the need for at least some minor system modifications. The great majority of both government and contractor program managers do not perceive the need for major modifications.

- Eighteen percent (18%) of the contractor business managers approximated the cost of operating their C/SCSC-accepted systems (not the cost of C/SCSC) as 5 man-years per year or less. Nearly one-half (46%) approximated this cost as 10 man-years per year or less; while two-thirds (67%) and three-fourths (76%) approximated the cost as 15 and 20 man-years per year or less, respectively. Patterns in the data suggest that perceptions of whether benefits outweigh costs appear to be inversely related to the cost of operating C/SCSC-accepted systems. Additionally the data suggests that these costs vary directly with the dollar value of the applicable contract. These patterns in the data appear consistent with expectations.

2.0 CRITERIA CONCEPT AND APPROACH

2.1 Background

The use of C/SCSC and the criteria approach has been DOD policy since 1967 (approximately 16 years). The degree of acceptance of this policy and its practice was examined on a general level. More specific concerns are covered in later paragraphs.

A related concern on this general level is whether the policy intention of using criteria has actually evolved into the practice of requiring a specific "system"; or whether DOD practices may be overly specified and procedural.

2.2 Overview of Related Questions

To determine perceptions and acceptance of the C/SCSC approach on a general basis, we asked questions which covered a range of subject matter from the concept of "criteria" to DOD practices in implementing C/SCSC. Similar questions were asked of program managers and business managers, both government and contractor. The specific questions related to perceived assessments regarding:

- The validity of using a criteria concept.
- The appropriateness of DOD's currently delineated criteria as the basis for evaluating contractor systems.
- Whether the approach of ensuring that contractor systems are adequate is as good or better than other approaches for obtaining reliable cost/schedule data.
- The effectiveness of DOD practices in ensuring that contractor systems are adequate.

2.3 Results

To address these objectives, respondents were presented with an attitudinal statement pertaining to each of the four (4) topics. Respondents were asked to indicate the degree to which they agreed or disagreed with each, using a five-point scale (agree strongly, agree somewhat, disagree somewhat, disagree strongly or neither agree nor disagree). The attitudinal statements and respondents are briefly identified for each of the four (4) topics and the results are presented in the tables that follow.

2.3.1 Criteria Concept, the Criteria, DOD Approach and DOD Practices

First, regarding the validity of using a criteria concept, government program managers and contractor program and business managers were asked whether the concept of using criteria rather than specifying a single system for all contractors is valid (GPM-10, CPM-14 and CBM-32).

Second, regarding the appropriateness of the currently delineated criteria, government program and business managers, and contractor program and business managers were asked whether the current DOD criteria are appropriate for evaluating contractor systems (GPM-12, GBM-27, CPM-16 and CBM-34).

Third, regarding the approach of ensuring system adequacy, government program managers and contractor program and business managers were asked whether ensuring system adequacy is as good or better than other approaches for obtaining cost/schedule status (GPM-11, CPM-15 and CBM-33).

Fourth, for effectiveness of DOD practices, government program and business managers, and contractor program and business managers were asked whether DOD practices were effective in ensuring that contractor systems are adequate for cost/schedule reporting (GPM-14, GBM-29, CPM-18 and CBM-30).

Table 2.1 below shows the overall results from the four (4) topics.

TABLE 2.1
CRITERIA CONCEPT AND APPROACH

Statement	Government		Contractor	
	Prog. Mgr. %	Bus Mgr. %	Prog. Mgr. %	Bus Mgr. %
Criteria Concept is Valid	77	*	82	88
Current Criteria are Appropriate	71	77	63	69
Ensuring System Adequacy is as Good or Better than Other Approaches	73	*	77	77
DOD Practices are Effective	74	82	67	75

The numerical values in this table indicate the percent of respondents that agreed (either strongly or somewhat) with the specific statement.

* Not asked.

Note: For quality control purposes, the first, second and fourth questions above were asked in the negative (e.g.: are not valid; are not appropriate; and are not effective). For presentation purposes, the responses have been reversed to show the positive questions.

It appears evident from the table that agreement among all managers questioned is most favorable towards the validity of the criteria concept. While most of the managers consider the current criteria to be appropriate, this topic elicits the weakest favorable response, especially among contractors. Approximately one-in-three contractor managers disagreed with this statement. Within each category of manager (government program manager, contractor program manager and contractor business manager), there appears to be a relatively steep drop in strength of agreement from the manager's responses regarding the validity of the criteria concept. This drop in strength of agreement appears most evident among the contractor managers (i.e.: from 82% to 63% for program managers; and from 88% to 69% for business managers). Apparently, more disagreement exists regarding the currently delineated criteria than whether the concept itself is valid.

The differences in the relative strength of agreement between the validity of the criteria concept and the appropriateness of the current criteria should not be unexpected.

Valid cost/schedule information has been and should continue to be necessary in order to assess contract cost/schedule status. Some policy and practice on this matter should be expected as a fact-of-life. We also should expect a criteria approach to appeal to both DOD and its contractors. We should expect that the notion of DOD specifying a set of criteria which its contractors must meet to be a preferable alternative to requiring contractors to use some specific system. A criteria "approach" satisfies DOD needs by promising valid information and it satisfies the DOD contractors by promising minimum interference or minimum imposition of unneeded internal management systems.

However, we also should expect differences between DOD and contractors to arise regarding a criteria approach as we move away from the conceptual notion and move more towards practical implementation. This expectation appears to be consistent with the data.

Most managers agreed that the approach of ensuring an adequate basis (system adequacy) for cost/schedule information is as good or better than other approaches for obtaining cost and schedule status. Most managers similarly agreed that DOD practices are effective in accomplishing this objective, although contractor program managers appear to be less in agreement than the other three (3) categories of managers.

Regarding whether DOD practices are considered overly specified and procedural, it should be noted that agreement appeared reasonably strong and consistent between all categories of managers that DOD practices are effective. Agreement appeared even stronger in this area than whether the current criteria are appropriate. This might be considered somewhat surprising, since DOD "practices" regarding C/SCSC also could be considered relatively less conceptual and more towards practical implementation than a statement or delineation of a set of criteria.

The data also appear to suggest that business managers have more favorable views regarding these topics than the program managers for whom they work. This is consistent with the results related to the usefulness of cost/schedule reports (discussed in paragraph 1.3.2 above).

2.3.2 Differences between Demonstration Reviews and Subsequent Application Reviews (SARs)

The contractor business manager responses for each of the four (4) topics were cross-tabulated with the type of review (either demonstration or SAR) that the government performed on the specific contract (CBM-1). This was done to determine if there might be differences in contractor perceptions regarding the criteria concept and approach related to whether the contractor had just undergone a demonstration or a SAR. The results are shown in Table 2.2.

TABLE 2.2

PERCEPTIONS OF CRITERIA CONCEPT AND APPROACH BY TYPE OF REVIEW

Statement	Contractor Business Managers		
	Demonstration	SAR	Overall
	%	%	%
Criteria Concept is Valid	82	92	88
Current Criteria are Appropriate	55	75	69
Ensuring System Adequacy is as Good or Better than Other Approaches	76	78	77
DOD Practices are Effective	61	81	75

The numerical values in this table indicate the percent of contractor business managers that agreed (either strongly or somewhat) with the specific statement.

The data in Table 2.2 suggest more favorable perceptions regarding the criteria concept, the current criteria and the effectiveness of DOD practices for contractors who had undergone SARs than for contractors who had just undergone the demonstration process. The differences in the table are statistically significant at the 95% confidence level for both the validity of the criteria concept and the effectiveness of DOD practices.

While the review process will be examined in more detail in the next section of this report, it should be noted here that a SAR is normally performed when

a contractor already has a previously accepted system. It, therefore, appears from the data that contractors perceive the criteria concept, the current criteria, and DOD practices more favorably after their C/SCSC-accepted system has been operating for some time, rather than shortly after their initial exposure.

2.4 Summary

Based on the respondent data, we conclude that:

- The criteria concept is considered valid by a large majority of the respondents (government program managers; and contractor program and business managers).
- Most managers in all four (4) categories (government program and business managers; and contractor program and business managers) considered the currently delineated criteria appropriate as the basis for evaluating contractor systems. While most contractor managers considered the criteria appropriate, the percent was not as high as for their counterpart government managers. In addition; for contractor managers, there appeared to be less agreement that the currently delineated criteria are appropriate than that the criteria concept is valid.
- A large majority of the respondents (government program managers; and contractor program and business managers) agreed that the approach of ensuring that an adequate basis exists for keeping the program office informed is as good or better than other approaches to achieving the same objective.
- A large majority in all four (4) categories (government program and business managers; and contractor program and business managers) considered DOD practices effective in ensuring that an adequate basis exists in a contractor's system for reporting cost/schedule status. While a large majority of contractor managers considered DOD practices effective, the percent was not as high as for the government managers. On a general level, it does not appear that DOD practices are overly specified. Specific DOD practices as they relate to the C/SCSC review process and depth of reporting are discussed as separate concerns in later sections of this report.
- For the validity of the criteria concept and the effectiveness of DOD practices, contractor business managers have significantly more favorable perceptions after undergoing the Subsequent Application Review process than after undergoing the demonstration process.

3.0 C/SCSC REVIEW PROCESS

3.1 Background

A key practice in the C/SCSC approach is the review process. Since this process can be viewed as a government evaluation of contractor systems and practices, it provides the circumstances for adversarial relationships and mutual concerns.

As part of the C/SCSC concept and approach, contractors demonstrate their systems in operation to DOD review teams. The government review team evaluates whether to accept (or "validate") the contractor's demonstrated system as compliant with C/SCSC. This is referred to as the demonstration process (or sometimes, the "validation" of the contractor's system).

If the contractor's system was previously accepted as C/SCSC-compliant on an earlier contract of the same type (i.e., Research and Development work versus Production work), then the demonstration and review practices for the current contract are normally less extensive than for the earlier contract that led to the previous acceptance. This less extensive review process is referred to as a Subsequent Application Review (SAR).

We examined contractor and DOD experience and perceptions regarding the conduct and effectiveness of demonstration reviews and SARs.

3.2 Overview of Related Questions

As part of this examination of the C/SCSC review process, we included questions which directly addressed experience, assessments and perceptions in the eight (8) areas listed below. The respondents for these questions were the business managers, both contractor and government. Where appropriate, similar questions were asked of both categories of managers.

- Experience and perceptions relating to the DOD organizational composition of review teams.
- Experience regarding duration of reviews.
- Experience regarding review team size.
- Experience regarding the need for contractor corrective action prior to acceptance.
- Perceptions of review team performance and effectiveness.
- Assessments of contractor cost solely attributable to the conduct of the reviews.
- Perceptions of whether the benefits of the review process outweigh its costs.
- Perceptions of the need for the review process.

3.3 Results

The C/SCSC review process normally entails several in-plant visits by DOU review teams. For the following questions which relate to organizational participation, review duration, team size, number of discrepancies and team performance, the respondents were asked to use as a reference only the one visit they considered to have been the key C/SCSC review for the particular contract.

3.3.1 Organizations Participating on the Review Team

Government and contractor business managers were asked to indicate which government organizations participated in the review (GBM-12B and 12C and CBM-11B). The responses are shown separately in Table 3.1 for Demonstration Reviews and SARS.

TABLE 3.1
PARTICIPATION IN THE REVIEW

Participating Organizations	Demonstrations		SARS	
	Gov't Bus. Mgr.	Contractor Bus. Mgr.	Gov't Bus. Mgr.	Contractor Bus. Mgr.
	%	%	%	%
Gov't Plant Representative (eg., DCAS, AFPRO, NAVPRO)	95	88	89	96
Program Office	88	88	97	93
Service Focal Point (HQ DARCOM, HQ NAVMAT, HQ AFSC)	77	85	70	82
DCAA	74	88	76	82
Commodity Command (eg., MICOM, ASD, NAVAIR)	60	33	52	48
Other	12	18	15	18

The numerical values in this table show the percent of respondents that indicated participation of the organizations listed. The respondent data for government business managers (other than "Program Office") includes only those reviews in which the program office indicated its own participation (GBM-12B).

As apparent from the data, the reviews teams are organized to include the participation of several organizations.

3.3.2 Need for Participation in the Review Process

Government business managers were asked to indicate how necessary (very necessary, somewhat necessary, not necessary) to the C/SCSC review process was the participation of the various government organizations (GBM-14A, 14B, 14C, 14D and 14E). The responses are shown in Table 3.2.

TABLE 3.2
NEED FOR PARTICIPATION

<u>Participating Organization</u>	<u>Necessary %</u>
Program Office	99
Contract Administration Office (e.g., DCAS, AFPRO)	97
DCAA	94
Service Focal Point (HQ DARCOM, HQ NAVMAT, HQ AFSC)	74
Commodity Command (e.g., ASD, NAVAIR, MICOM)	73

The numerical values in this table show the percent of respondents that indicated participation of the listed organization was necessary (very necessary or somewhat necessary) to the C/SCSC review process. Respondents were government business managers, whether their program office participated in the review or not.

The data were separately obtained for Demonstrations and SARs. However, there was no apparent difference in the pattern of the results between the two types of reviews. Therefore, the data are shown as aggregated.

It is apparent from the data that most government business managers feel that participation is necessary for each of those organizations which currently provide members to review teams. From the business manager's perspective, there was almost unanimous agreement regarding the necessity for participation of the program office, contract administration office and the DCAA.

3.3.3 Duration of C/SCSC Reviews

Government and contractor business managers were asked to indicate the duration of the review in workdays (GBM-12D and CBM-11C). The responses are shown separately in Table 3.3 for Demonstration Reviews and SARs.

TABLE 3.3
DURATION OF C/SCSC REVIEWS

Workdays	Demonstrations		SARs	
	Government Bus. Mgr.	Contractor Bus. Mgr.	Government Bus. Mgr.	Contractor Bus. Mgr.
	%	%	%	%
0 - 5	26	21	76	68
6 - 10	26	24	16	29
11 - 15	39	37	7	2
More Than 15	9	18	1	1
TOTAL	100	100	100	100

The numerical values in this table show the percent of respondents that selected each number of workdays, for the duration of their applicable review.

As evident in the data, most Demonstrations are longer in duration than SARs.

For Demonstrations, approximately one-half of the reviews (52% according to government business managers and 45% according to contractor business managers) are completed within two-weeks (10 workdays or less). More than four-fifths of the reviews (91% according to government business managers and 82% according to contractor business managers) are completed within three weeks.

The data suggest that contractor business managers perceive the Demonstration Reviews as longer in duration than do their government counterparts. A possible explanation is that government team members may frequently be released from team participation after their team assignments are completed. This could include team members from the business manager's office. However, the team leadership may remain in the contractor's plant to complete followup actions and report writing. These activities may involve interface with the contractor business manager.

Most SARs are completed within one (1) week (0-5 workdays) while nearly all SARs (92% according to government business managers and 97% according to contractor business managers) are completed within two (2) weeks.

As shown in the data, the duration of the reviews appears to be somewhat variable. This result should not be completely unexpected. The set of considerations attendant to any given review is probably unique from all other reviews. For example, while the "shorter" SARs are normally conducted solely for contractor systems that have been previously accepted for the same type of work (i.e., Research and Development versus Production), SARs may sometimes (under conditions specified by the military services) be conducted in lieu of the "longer" Demonstration Reviews. Such "hybrid" SARs may be expected to be longer in duration than normal SARs. In addition, Demonstrations and SARs are sometimes jointly conducted on more than one contract or program. These reviews may be expected to be longer in duration than those conducted for one contract or program.

3.3.4 Size of Review Team

Government and contractor business managers were asked to indicate the size of the government review team (GBM-12E and CBM-11D). The responses are shown separately in Table 3.4 for Demonstration Reviews and SARs.

TABLE 3.4
SIZE OF REVIEW TEAM

Number of Persons	Demonstrations		SARs	
	Government Bus. Mgr.	Contractor Bus. Mgr.	Government Bus. Mgr.	Contractor Bus. Mgr.
	%	%	%	%
0 - 7	23	15	33	23
8 - 11	37	43	44	45
12 - 15	28	15	18	18
16 - 19	7	12	5	10
More Than 19	5	15	0	4
TOTAL	100	100	100	100

The numerical values in this table show the percent of respondents that indicated each number of persons, as the size of the applicable review team.

Based on the respondent data, the predominant review team size is 8-11 persons. For Demonstration Reviews, approximately 60% of the respondents indicated the review team size was 11 persons or less. For SARS, approximately three-fourths (77%) of the government business managers and two-thirds (68%) of the contractor business managers indicated that the review team size was 11 persons or less.

The pattern of the data within each of the two groups of respondents (government business managers and contractor business managers) suggests that the number of persons on Demonstration Review teams is greater than the number on SAR teams. Since Demonstration Reviews are normally more extensive than SARs, this should be expected.

3.3.5 Discrepancies or Corrective Action Items.

Government and contractor business managers were asked to approximate the number of discrepancies or corrective action items that were identified by the DOD Review Team (GBM-12F and CBM-11E). The responses are shown in Table 3.5.

TABLE 3.5
DISCREPANCIES IDENTIFIED DURING THE REVIEW

Number of Discrepancies	Demonstrations		SARs	
	Government Bus. Mgr.	Contractor Bus. Mgr.	Government Bus. Mgr.	Contractor Bus. Mgr.
	%	%	%	%
0 - 10	51	45	67	67
11 - 20	24	14	21	22
21 - 30	14	14	7	6
More Than 30	11	27	5	5
TOTAL	100	100	100	100

The numerical values in this table show the percent of respondents that indicated the number of discrepancies listed.

Based on the respondent data for Demonstration Reviews, approximately one-half of the business managers (51% for government and 45% for contractors) indicated the number of discrepancies as 10 or less during the C/SCSC reviews of their contracts; while for SARs, approximately two-thirds (67%) of both government and contractor business managers indicated the number of discrepancies as 10 or less. For government business managers, 75% indicated 20 discrepancies or less during Demonstrations while 88% indicated 20 discrepancies or less during SARs. For contractor business managers, 59% indicated 20 discrepancies or less during Demonstrations while 89% indicated 20 discrepancies or less during SARs.

The data suggest that the need for contractor corrective actions prior to government acceptance is less during SARs than during Demonstration Reviews. This conclusion appears compatible with the more favorable perceptions that contractors have during SARs than during the demonstration process regarding the criteria concept, the current criteria and DOD practices (paragraph 2.3.2 above).

In addition we should expect a lesser number of corrective actions during SARs. Unlike contractors undergoing Demonstration Reviews, contractors undergoing SARs will always have a previously accepted system and have had prior exposure to one or more C/SCSC review teams. Contractors undergoing SARs should not be as likely to have significant system discrepancies which would have been identified and corrected during the earlier Demonstration process. These contractors should also be better prepared to avoid discrepancies based on their past experience with DOD C/SCSC review procedures.

3.3.6 Perceptions of Review Team Performance

Contractor business managers were asked to rate (excellent, good, fair, poor, or no opinion) the C/SCSC review team's performance on six (6) characteristics. The characteristics are listed in Table 3.6. Percentages are shown for combined ratings of "excellent" and "good" (CBM-11F).

TABLE 3.6
REVIEW TEAM PERFORMANCE

Review Team Characteristic	Demonstration Review	SAR
	%	%
Working Relationships	94	93
Overall Professionalism and Effectiveness	76	86
Leadership and Control	76	82
Thoroughness	73	84
Common Sense and Flexibility	55	68
Technical Qualifications	52	71

The numerical values in this table indicate the percent of contractor business manager respondents who rated the team characteristic as either "excellent" or "good".

The data show that the majority of contractor business managers perceive that DOD review teams do a good-to-excellent job. Ratings are highest for working relationships. There are also large majorities (good-to-excellent) for overall effectiveness, leadership and thoroughness. The smallest majorities are in the characteristics of flexibility and technical qualifications.

For each characteristic (except for working relationships where the good-to-excellent ratings included over 90% of the respondents), the percent of respondents who gave a combined rating of excellent and good is higher for SARs than for Demonstration reviews.

Since the number of required corrective action items appears to be higher for Demonstrations than for SARs (paragraph 3.3.5 above), it might appear that the level of the review team rating could be inversely affected by the number of discrepancies identified by the review team. However, cross-tabulations of review team ratings with number of discrepancies did not support this inference. There were no apparent differences in review team ratings related to number of discrepancies.

3.3.7 Cost Attributable to the Review Process

Contractor business managers were asked to estimate the number of man-days spent by their company in support of the review process over and above the normal expenditures for the day-to-day operation of their cost/schedule control system (CBM-12). The responses are shown in Table 3.7.

TABLE 3.7
REVIEW PROCESS SUPPORT

<u>Review Process Support in Man-days</u>	<u>Demonstrations</u>	<u>SARs</u>
	<u>%</u>	<u>%</u>
0 - 25	6	20
26 - 50	13	14
51 - 100	6	19
101 - 200	41	27
201 - 300	6	6
More Than 300	28	14
<hr/> TOTAL	<hr/> 100	<hr/> 100

The responses in this table represent estimates provided by contractor business managers.

The data appear to show that more support is required for the demonstration process than for the SAR process. This conclusion is consistent with the data that show Demonstration Reviews to be longer in duration than SARs (paragraph 3.3.3 above). Specifically, 100 man-days or less was estimated for 25% of the demonstration processes and for 53% of the SAR processes. Two-hundred (200) man-days or less was estimated for 66% of the demonstration processes and for 80% of the SAR processes.

3.3.8 Cost Versus Benefit of the Review Process

Contractor business managers were asked if the benefits to their company of the review process outweighed its costs (CBM-13). Responses are shown in Table 3.8.

TABLE 3.8
COST VERSUS BENEFIT OF THE REVIEW PROCESS

<u>Benefits Outweigh Costs</u>	<u>Demonstrations %</u>	<u>SARs %</u>
Yes	52	30
No	39	55
No Opinion	9	15
<hr/> TOTAL	<hr/> 100	<hr/> 100

The numerical values in this table indicate the percent of contractor business manager respondents answering Yes, No, or No opinion regarding whether the benefits of the review process outweigh its costs.

These results appear to show more favorable perceptions towards Demonstration Reviews than towards SARs. The contractor business manager perceptions of whether the benefits outweigh costs for Demonstration Reviews appears to be approximately the same as their assessments regarding whether the overall benefits of their C/SCSC-accepted system outweigh its operating costs (see Table 1.4).

The more unfavorable perception regarding the benefits of SARs versus their cost appears surprising if solely considering some of the previously cited results, such as number of required corrective actions (Table 3.5), rating of review team performance (Table 3.6), cost of the review process (Table 3.7), and perceptions regarding the criteria concept, the current criteria and UOU practices (Table 2.2). The results for each of these would appear to infer more favorable perceptions of SARs than Demonstrations.

However, we also cross-tabulated the contractor business manager responses for benefits versus costs with responses that contained estimates of man-days spent in support of the review process (Table 3.7) (CBM-12).

For SARs, there was no apparent relationship regarding whether the responses of benefits versus costs varied with differences between the estimated cost of the review process. The relationship appeared to be relatively inelastic.

For Demonstrations the relationship appeared to be less inelastic. Six out of eight of the respondents (75%) who estimated the cost of the review process as 100 man-days or less indicated that the benefits outweighed costs; while only 42% of the respondents who estimated the cost of the review process as greater than 100 man-days indicated that the benefits outweighed costs. While some relationship is suggested, the small size of the sample indicating 100 man-days or less precludes any definitive conclusion that such a relationship exists.

It should be noted that the purpose of both Demonstration Reviews and SARs is for contractors to demonstrate to the government that their systems comply with C/SCSC and that they operate as advertised. If this government "show-me" requirement did not exist, contractors could conceivably still operate C/SCSC-compliant systems. The reviews therefore do not serve contractor purposes nearly as much as they serve the government's purpose of verifying that the contractor systems are providing valid cost/schedule information.

Under these conditions, both the lack of benefit perceived by contractors for SARs and the inelasticity of this perception to the cost of SAR support is understandable. For Demonstration Reviews, contractors will probably be experiencing some concepts and practices related to C/SCSC that are new to the company. They may consider some of these concepts and practices as beneficial. This benefit is not as likely to occur during SARs. While both Demonstration Reviews and SARs may be viewed by contractors as unwanted or unneeded "tests", contractors apparently view the Demonstration Reviews (and the initial exposure to C/SCSC that is normally associated with these reviews) as more beneficial to them than SARs.

3.3.9 Need for the Review Process

Government business managers were asked how necessary (very necessary, somewhat necessary, not necessary) the C/SCSC review process is to the proper functioning of the contractor's cost and schedule control system (GBM-15). The responses are shown in Table 3.9.

TABLE 3.9
NEED FOR REVIEW PROCESS

<u>Necessity of Review Process</u>	<u>Demonstration %</u>	<u>SAR %</u>
Very Necessary	83	69
Somewhat Necessary	15	29
Not Necessary	2	2
<hr/> TOTAL	<hr/> 100	<hr/> 100

The numerical values in this table show the percent of government business manager respondents that selected the choices shown.

It is apparent from the data that there was nearly unanimous agreement among government business managers, regarding the need for the review process. Ninety-eight percent (98%) indicated the review process was necessary (very necessary or somewhat necessary). Only 2% of the respondents felt that the review process was "not necessary". Based on the scale rating (very necessary versus somewhat necessary), agreement regarding the need for the demonstration process appeared to be slightly stronger than for the SAR process.

The near unanimous result is significant from two aspects.

First, the respondents are from the program offices that are responsible for using and interpreting the information reported from contractor systems. They are not primarily concerned with C/SCSC-compliance for its own sake.

Second, the strength of their viewpoint highlights a difference in needs between the government and its contractors, as represented by their business manager respondents. Government business managers appear to be saying that the review process is essential; they need to have verification that the contractor's system is operating properly. From earlier cited contractor business manager responses, regarding whether benefits of the review process outweigh its cost, contractor business managers appear to be saying that this verification is not necessarily for their benefit (paragraph 3.3.8 above).

3.4. Summary

Based on the respondent data, we conclude that:

- DOD Review teams are normally organized to include participation of the program office, government plant representatives, resident DCAA representatives, service focal point office and commodity command.
- Most government business managers feel that review team participation is necessary for each of the organizations which currently provide team members. There was nearly unanimous agreement regarding the necessity for program office, contract administration office and DCAA participation.
- For Demonstrations, approximately one-half of the reviews are completed within two weeks and more than four-fifths are completed within three weeks. Most SARs are completed within one week.
- The predominant number of review team members is 8-11 persons. For Demonstration Reviews, approximately 60% of the respondents indicated the review team size was 11 persons or less. For SARs, approximately three-fourths of the government business managers and two-thirds of the contractor business managers indicated the review team size was 11 persons or less.
- For Demonstrations, 10 discrepancies or less (requiring contractor corrective actions) are identified during approximately one-half of the reviews. For SARs, 10 discrepancies or less are identified during approximately two-thirds of the reviews.
- The majority of contractor business managers feel that DOD review teams do a good-to-excellent job when evaluating their company's C/SCSC application. The largest majorities (good-to-excellent) were for three characteristics: overall effectiveness, leadership and thoroughness. The smallest majorities were for two characteristics: flexibility and technical qualifications.
- For costs solely attributable to the conduct of C/SCSC reviews, the contractor business manager responses appear to show that more support is required for the demonstration process than for SARs. For example, 100 man-days or less was estimated for 25% of the demonstration processes and for 53% of the SAR processes.
- The majority of contractor business managers indicated that they believe that the benefits to their company of the demonstration process outweigh its costs (costs solely attributable to the reviews). However, for SARs, the majority of contractor business managers felt that the benefits did not outweigh the costs.

- Government business managers were nearly unanimous (98%) in indicating that the C/SCSC review process was necessary. This was true for both the demonstration process and SAR process. Based on the scale ratings, agreement regarding the need for the demonstration process appeared to be slightly stronger than for the SAR process.

4.0 CONSISTENCY OF C/SCSC INTERPRETATION

4.1 Background

Since each C/SCSC review team (in terms of the people on the team) is different from all other teams, we should expect contractor concern regarding the consistency of C/SCSC interpretations and evaluations between different teams.

Uniformity of criteria interpretation (under similar circumstances) should be important for efficient government implementation and equity of treatment between contractors. In practice, the responsibility for uniform implementation of C/SCSC and evaluation of contractor systems is assigned by DOD to the major commands in the military services. Each major command headquarters has a focal point which organizes and directs review teams, and provides interpretation of how the criteria apply to specific contractor systems.

Based on contractor experience with DOD review teams, we examined the degree of contractor concern regarding consistency of C/SCSC interpretations.

4.2 Related Question

The specific question was addressed to contractor business managers. It related to perceived assessments regarding:

- Consistency of the review team's C/SCSC interpretations with other DOD review teams' interpretations.

4.3 Results

Contractor business managers were asked (yes, no, or no opinion) whether their review team's C/SCSC interpretations were reasonably consistent with other DOD review teams' interpretations (CBM-116). The responses are shown in Table 4.1.

TABLE 4.1
CONSISTENCY OF C/SCSC INTERPRETATIONS

<u>C/SCSC Interpretations are Reasonably Consistent</u>	<u>Demonstrations %</u>	<u>SARs %</u>
Yes	58	71
No	15	8
No Opinion	27	21
<hr/>	<hr/>	<hr/>
TOTAL	100	100

The numerical values in this table show the percent of contractor business manager respondents answering yes, no or no opinion regarding whether C/SCSC interpretations are reasonably consistent.

For the respondents who expressed their opinion (yes or no), 79% of those who went through Demonstration Reviews and 90% of those who went through SARs indicated reasonable consistency with other DOD review teams.

It should be noted that contractors undergoing SARs always would have been through an earlier demonstration process. The data therefore appears to suggest that those respondents likely to have been through prior reviews have higher agreement that DOD review teams are reasonably consistent in their C/SCSC interpretations (than those respondents who may not have been through prior reviews).

4.4 Summary

Based on the respondent data, we conclude that:

- Most contractor business managers feel that their review team's C/SCSC interpretations were reasonably consistent with other DOD review teams' interpretations. The pattern of the data appears to suggest that there is higher agreement regarding team consistency for those contractors undergoing SARs than for those undergoing Demonstration Reviews.

5.0 TIME ALLOWANCES FOR IMPLEMENTING C/SCSC

5.1 Background

The time allowances for implementing C/SCSC on a contract and accomplishing the C/SCSC review process have frequently been cited as concerns.

A Defense Acquisition Regulation (DAR) contract clause is normally used in contracts when C/SCSC compliance is required. The clause indicates that the contractor should be prepared to demonstrate its cost/schedule control system within ninety (90) calendar days after contract award (or a different number of days, as otherwise agreed to by the contracting parties).

For C/SCSC implementation and an effective demonstration and verification (via a Demonstration or a Subsequent Application Review), the performance measurement baseline must be established. If the performance measurement baseline for the contract is not established, then many of the key contractor subsystems cannot be adequately demonstrated or verified for that contract.

5.2 Overview of Related Questions

To determine experience and perceptions regarding time allowances, we included questions which directly addressed experience and assessments in the areas listed below. The respondents for these questions were the business managers, both contractor and government. As in prior sections, we asked similar questions of both categories of managers.

- Experience regarding when the performance measurement baseline was established, including contracts that were not definitized at contract award.
- Assessments regarding when the performance measurement baseline should be established.
- Experience regarding when the Demonstration Review or Subsequent Application Review (SAR) was held.

5.3 Results

5.3.1 Time Actually Used to Establish the C/SCSC-Related Performance Measurement Baseline

Government and contractor business managers were asked to approximate the number of months after contract award that the C/SCSC performance measurement baseline was established (GBM-10 and CBM-10). The results are shown in Table 5.1.

TABLE 5.1
TIME TO ESTABLISH THE PERFORMANCE MEASUREMENT BASELINE

<u>Number of Months</u>		<u>Government Bus. Mgrs.</u>		<u>Contractor Bus. Mgrs.</u>	
<u>At Least</u>	<u>Less Than</u>	<u>Demonstration</u>	<u>SAR</u>	<u>Demonstration</u>	<u>SAR</u>
		<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>
-	3	37	31	15	30
3	6	31	37	37	46
6	9	8	15	18	14
9	12	8	9	6	4
12	15	4	3	18	3
15	-	12	5	6	3
TOTAL		100	100	100	100

The numerical values in this table show the percent of respondents who indicated, in number of months after contract award, when the performance measurement baseline was established. The data is differentiated by the type of review.

For government business managers, the pattern of data did not show a readily apparent difference between contractors undergoing SARs and demonstration processes. For example, the government business managers indicated that 68% of their contracts had baselines established within six (6) months, regardless of the review process.

However, based on the contractor respondent data, it appears to take longer to establish the performance measurement baseline for contracts undergoing the demonstration process than for contracts undergoing the SAR process. For example, contractor business managers indicated that baselines were established within six (6) months for 76% of the contracts undergoing SARs, but for only 52% of the contracts undergoing the demonstration process.

Since contractor business managers are normally more closely involved with establishing the internal baselines on their contracts than are the government business managers, we suspect that the contractor responses are more accurate for this particular question.

In general, the result obtained from the contractor respondents should be the one expected. Contractors undergoing SARs would have used their systems on earlier contracts and would have a proven capability for developing a baseline. Contractors undergoing the demonstration process are not as likely to have this proven capability.

5.3.2 Effect of Undefinitized Contracts on Establishing the Performance Measurement Baseline

Government and contractor business managers were asked whether their contract was definitized at the time of contract award (GBM-8 and CBM-8). These responses were cross-tabulated with the responses for when the performance measurement baseline was established (GBM-10 and CBM-10). The results are shown in Table 5.2.

TABLE 5.2
EFFECT OF UNDEFINITIZED CONTRACTS

Number of Months		Contract Definitized at Contract Award			
		Government Bus. Mgrs.		Contractor Bus. Mgrs.	
At Least	Less Than	Yes %	No %	Yes %	No %
-	3	34	28	30	20
3	6	35	33	52	25
6	9	11	15	13	20
9	12	8	13	3	8
12	-	12	11	2	27
TOTAL		100	100	100	100

The numerical values in this table show the percent of respondents who indicated, in number of months after contract award, when the performance measurement baseline was established.

Based on the contractor respondent data, it appears to take longer to establish the performance measurement baseline for undefinitized contracts than for contracts that are definitized when awarded. For example, contractor business managers indicated that baselines were established within

six (6) months for 82% of the contracts definitized at contract award, but for only 45% of the undefinitized contracts.

As in the data which differentiated between contracts undergoing the demonstration or SAR process (Table 5.1), this result is not as apparent from the government respondents. For example, government business managers indicated that baselines were established within six (6) months for 69% of the contracts definitized at contract award and for 61% of the undefinitized contracts.

For contracts not definitized at the time of contract award, government and contractor business managers also were asked to approximate how many months elapsed from contract award to contract definitization (GBM-9 and CBM-9). These responses were cross-tabulated with the responses for when the performance measurement baseline was established (GBM-10 and CBM-10). The results of these cross-tabulations are shown in Table 5.3.

TABLE 5.3
PERFORMANCE MEASUREMENT BASELINE VERSUS DEFINITIZATION DATE

<u>Performance Measurement Baseline Established</u>	<u>Government Bus. Mgr. %</u>	<u>Contractor Bus. Mgr. %</u>
Earlier than when Contract Definitized	40	46
During Same Period as Contract Definitized	33	33
Later than when Contract Definitized	27	21
<u>TOTAL</u>	<u>100</u>	<u>100</u>

The numerical values in this table show the percent of respondents who indicated that the C/SCSC-related performance measurement baseline was established earlier, later, or in the same 3-month time period as when the contract was definitized.

In most cases, for contracts not definitized at contract award, contractors establish the performance measurement baseline earlier or in the same time frame that the contract becomes definitized. It appears that less than 30% of the baselines are established after the contract is definitized.

Based on the data in Table 5.2, it appears that for undefinitized contracts, the performance measurement baseline takes longer to establish than for other contracts. However, from Table 5.3, baselines are frequently established prior to definitization (40% of the occurrences according to government respondents and 46% according to contractor respondents).

5.3.3 Earliest Reasonable Time to Establish the C/SCSC-Related Performance Measurement Baseline

Government business managers were asked to approximate the number of months after contract award that the C/SCSC performance measurement baseline could reasonably have been expected to be established (GBM-11). The results are shown in Table 5.4.

TABLE 5.4
EARLIEST REASONABLE TIME THAT BASELINE COULD HAVE BEEN ESTABLISHED

Number of Months		Government Business Managers	
At Least	Less Than	Demonstration	SAR
		%	%
-	3	35	36
3	6	37	45
6	9	14	10
9	12	4	6
12	-	10	3
TOTAL		100	100

The numerical values in this table show the percent of government business manager respondents who indicated, in number of months after contract award, when the performance measurement baseline could reasonably have been established. The data are differentiated by the type of review.

Most government business managers apparently expect their contractors can establish their performance measurement baselines within six (6) months of contract award.

Although the difference appears somewhat small, the data may also suggest that government business managers expect contractors undergoing the demonstration process to need more time to establish their baselines than contractors undergoing the SAR process. As discussed earlier, contractors undergoing SARs already would have a proven capability in establishing baselines.

To get a clearer insight into whether government business managers were satisfied with the length of time contractors were using for establishing their performance measurement baselines, we cross-tabulated these responses (Table 5.4) with the earlier government business manager responses regarding when the baselines were actually established (Table 5.1). These results are shown in Table 5.5.

TABLE 5.5
EVALUATION OF BASELINE TIMELINESS

Government Business Managers					
Number of Months to Establish Baseline		Reasonable Time that Baseline Could Have Been Established			
<u>At Least</u>	<u>Less Than</u>	<u>Less %</u>	<u>Same %</u>	<u>More %</u>	<u>Total %</u>
-	3	0	78	22	100
3	6	19	73	8	100
6	12	57	40	3	100
12	-	69	31	0	100

The numerical values in this table indicate the percent of respondents who felt that the contract performance measurement baseline could reasonably have been established in "less " time, in the "same" time, or in "more" time than it actually was established. These data are a cross-tabulation of data used as the sources for Table 5.1 (Business Manager) and Table 5.4.

For contractors who take at least three (3) months but less than six (6) months to establish their performance measurement baselines, approximately one-fifth (19%) of the government business managers apparently feel that the job can be done more quickly. When contractors take six (6) months or longer, then most of these managers apparently feel that the baseline can be established more quickly.

5.3.4 Elapsed Time Until Conduct of C/SCSC Review

Government and contractor business managers were asked to approximate the number of months after contract award that the Demonstration Review or Subsequent Application Review (SAR) was held. The respondents were asked to use as a review reference only the one visit that they considered the key C/SCSC review for this contract (GBM-T2A and CBM-11A). The responses are shown in Table 5.6.

TABLE 5.6
ELAPSED TIME TO KEY C/SCSC VISIT

Number of Months		Government Bus. Mgrs.		Contractor Bus. Mgrs.	
At Least	Less Than	<u>Demonstration</u>	<u>SAR</u>	<u>Demonstration</u>	<u>SAR</u>
		%	%	%	%
-	3	9	3	0	2
3	6	17	33	3	28
6	12	43	37	33	44
12	18	13	18	31	12
18	24	2	6	15	6
24	30	7	3	9	4
30	-	9	0	9	4
TOTAL		100	100	100	100

The numerical values in this table show the percent of respondents who indicated, in number of months after contract award, when the one key C/SCSC visit was held. The data is differentiated by the type of review.

From the data, the percentage of occurrences falling within ninety (90) calendar days after contract award (as "suggested" by the DAR clause for C/SCSC) was nearly negligible.

It appears from the data that what was regarded as the key visit for most SARs occurred within the first year of the contract (73% according to government respondents and 74% according to contractor respondents). The key visit for most demonstrations appears to have occurred within eighteen (18) months of contract award (82% according to government respondents and 67% according to contractor respondents).

As in the data shown earlier in Tables 5.1 and 5.2, differences in Table 5.6 between contracts undergoing the demonstration process versus the SAR process are more apparent for contractor respondents than for government respondents. An additional difficulty related to the data specific to Table 5.6 is the potential difference between the two categories of respondents regarding which visit might be perceived as the one key visit, particularly for the demonstration process.

Related to this difficulty, we cross-tabulated the data regarding when the performance measurement baseline was established and when the C/SCSC visit, regarded as key, was held. The results are shown in Table 5.7.

TABLE 5.7
PERFORMANCE MEASUREMENT BASELINE VERSUS REVIEW DATE

Performance Measurement Baseline Established	Government Bus. Mgr.		Contractor Bus. Mgr.	
	Demo.	SAR	Demo.	SAR
	%	%	%	%
Earlier Than Key Review	63	66	82	70
During Same Period as Key Review	22	21	12	29
Later Than Key Review	15	13	6	1
TOTAL	100	100	100	100

The numerical values in this table show the percent of respondents who indicated that the C/SCSC-related performance measurement baseline was established earlier, later, or in the same time period as when the key C/SCSC visit was held.

As indicated earlier (paragraph 5.1) it would be difficult to have an effective demonstration and verification process prior to the performance measurement baseline being established. However from these data, it appears that a significant number of government business managers (15% for contracts

undergoing the demonstration process and 13% for the SAR process) indicated that the baseline was established after the key C/SCSC visit. It may be that this key visit was not uniformly interpreted (e.g., Implementation Visit or Readiness Assessment, rather than the Demonstration Review).

For contractor respondents, there also was a difficulty in interpreting data regarding when specific events (relating to the review process) occurred. Contractor business managers were asked to approximate the number of months after contract award that they received official notification from their contracting office that their system had been satisfactorily applied to the contract (CBM-14). The responses are shown in Table 5.8.

TABLE 5.8
ELAPSED TIME UNTIL NOTIFICATION OF ACCEPTANCE

<u>Number of Months</u>		<u>Contractor Business Manager</u>	
<u>At Least</u>	<u>Less Than</u>	<u>Demonstration</u>	<u>SAR</u>
		<u>%</u>	<u>%</u>
-	6	18	18
6	12	3	44
12	18	18	21
18	24	29	10
24	30	7	2
30	36	3	2
36	42	18	2
42	48	0	1
48	-	4	0
TOTAL		100	100

The numerical values in this table show the percent of contractor business managers who indicated, in number of months after contract award, when they received official notification that their system had been satisfactorily applied to this contract.

It appears from the data that official notification takes longer for the demonstration process than for the SAR process. For example, the data show that within twelve (12) months after contract award, official notification of satisfactory application was received in 21% of the occurrences for demonstrations and 62% for SARs. Alternatively, the data show that two (2) years after contract award, one-third (32%) of these notifications remained for demonstrations while only 7% remained for SARs. To those familiar with the C/SCSC review processes, these results might not appear to be unexpected.

However, these data should be interpreted cautiously. These contractor business manager responses were cross-tabulated with the contractor business manager responses for when the C/SCSC review was held (Table 5.6). The cross-tabulation showed several occurrences where a respondent indicated that official notification was received prior to when the same respondent indicated the applicable C/SCSC review was held. This result was found in 21% of the responses for demonstrations and 13% for SARs; including, for the demonstration process, four (4) out of five (5) of the notifications which were indicated as occurring within the first six (6) months of contract award. To our knowledge, these results are not in accord with normal practice.

5.4 Summary

Based on the respondent data, we conclude that:

- The C/SCSC-related performance measurement baseline for most contracts is established within six (6) months of contract award. According to contractor business managers, it appears to take longer to establish the baselines for contracts undergoing the demonstration process than for contracts undergoing the SAR process. Since contractors undergoing SARs should have a previously proven capability for developing a baseline, this should be expected.
- According to contractor business managers, for contracts that are not definitized at contract award, it appears to take longer to establish the performance measurement baseline than for those contracts that were definitized at contract award. It also appears that somewhat less than half of the undefinitized contracts have their baselines established prior to definitization.
- Most government business managers appear to be satisfied that the elapsed time is reasonable when performance measurement baselines are established within six (6) months of contract award. Most government business managers also appear to feel that when baselines take longer than six (6) months, it could have been done more quickly.
- A negligible number of C/SCSC reviews appear to fall within the ninety (90) calendar day time-frame contained within the DAR C/SCSC clause. Most C/SCSC visits regarded as key by the respondents appeared to occur within eighteen (18) months of contract award for the demonstration process and within twelve (12) months of contract award for the SAR process.

6.0 COST/SCHEDULE PERFORMANCE REPORTING

6.1 Background

Depth, timeliness and use of cost/schedule data have been continuing concerns.

General guidance regarding depth and timeliness is contained in the Data Item Description for the Cost Performance Report (CPR). The guidance indicates that the level of detail to be reported in the CPR will normally be limited to level three (3) of the contract work breakdown structure (CWBS). For timeliness, the guidance indicates that the CPR should be submitted to the government no later than twenty-five (25) calendar days following the reporting cutoff date. Within this general guidance, each program office (as the intended CPR user) is essentially responsible for establishing its own reporting requirements.

In this area, we assessed the depth, timeliness and use of cost/schedule performance data. We included assessments related to the summary level CPR data as well as the lower level internal contractor data.

6.2 Overview of Related Questions

We included questions which directly addressed assessments and perceptions in the six (6) areas listed below. The respondents for these questions were program managers and business managers, both government and contractor.

- Assessments and perceptions regarding the depth and volume of CPR data.
- Assessments regarding the volume of internal contractor reports.
- Assessments and perceptions regarding the timeliness of CPR submittals.
- Assessments regarding the timeliness of internal contractor reports.
- Assessments and perceptions regarding the use of CPRs.
- Assessments regarding the use of contractor internal cost/schedule data.

6.3 Results

6.3.1 Depth of Cost Performance Report Data

Government and contractor business managers were asked to indicate the lowest CWBS level regularly reported on the CPR (GBM-16 and LBM-16). The results are shown in Table 6.1.

TABLE 6.1
CWBS REPORTING LEVEL

<u>Lowest CWBS Level Regularly Reported on CPR</u>	<u>Government Bus. Mgr. %</u>	<u>Contractor Bus. Mgr. %</u>
2	5	7
3	64	50
4	19	24
5	8	17
6 or lower	4	2
<hr/> TOTAL	<hr/> 100	<hr/> 100

The numerical values in this table show the percent of respondents that indicated the CWBS level shown, as the lowest level regularly reported on the CPR.

The majority of respondents indicated that CWBS level 3 or higher was the lowest level regularly reported (i.e., 69% for government respondents and 57% for contractor respondents). However, many respondents indicated lower level reporting. Less than 5% of the respondents indicated reporting below CWBS level 5.

Based on cross-tabulations of the respondent data, there appeared to be some differences in CWBS reporting levels related to the type of contract work (development versus production), contract value, contract type and weapons system. Some of these results are shown in Tables 6.2, 6.3 and 6.4.

TABLE 6.2
DEVELOPMENT VERSUS PRODUCTION WORK

<u>CWBS Level 3 or Higher Type of Work</u>	<u>Government Bus. Mgr. %</u>	<u>Contractor Bus. Mgr. %</u>
Development	67	47
Low Rate Production	73	67
Production	81	70
Overall	69	57

The numerical values in this table show the percent of respondents who indicated the lowest regular reporting level was CWBS level 3 or higher, for the type of work shown.

TABLE 6.3
CONTRACT VALUE

<u>CWBS Level 3 or Higher Contract Value</u>	<u>Government Bus. Mgr. %</u>	<u>Contractor Bus. Mgr. %</u>
Less Than \$160 Million	75	62
\$160 Million or More	63	52
Overall	69	57

The numerical values in this table show the percent of respondents who indicated the lowest regular reporting level was CWBS level 3 or higher, for the contract value shown.

TABLE 6.4
COST PLUS VERSUS FIXED PRICE INCENTIVE CONTRACTS

<u>CWBS Level 3 or Higher</u>	<u>Government Bus. Mgr.</u>	<u>Contractor Bus. Mgr.</u>
<u>Contract Type</u>	<u>%</u>	<u>%</u>
Cost Plus	65	55
Fixed Price Incentive	75	62
Overall	69	57

The numerical values in this table show the percent of respondents who indicated the lowest regular reporting level was CWBS level 3 or higher, for the contract type shown.

Both categories of respondents in Table 6.2 indicate a higher percentage of the production contracts being reported at CWBS level 3 or higher. This pattern of data suggests that CWBS reporting levels are "higher" on production contracts than on development contracts. This result would appear to be consistent with guidance contained in the DOD C/SCSC Joint Implementation Guide regarding differences between cost account levels on development and production type work.

The pattern of data in Table 6.3 suggests that CWBS reporting levels are also "higher" on contracts valued at less than \$160 million than on contracts valued at \$160 million or more (i.e., both categories of respondents show a higher percentage of contracts valued at less than \$160 million being reported at CWBS level 3 or higher). This result appears reasonable since higher dollar value contracts could have significantly higher dollar value CWBS reporting elements, without the additional lower level reporting.

In Table 6.4, both categories of respondents indicate a higher percentage of fixed-price incentive contracts being reported at CWBS level 3 or higher, thus suggesting lower CWBS reporting levels on cost-type contracts. This result also appears reasonable since cost-type contracts normally entail higher risk than fixed-price incentive contracts. With higher risk, we could expect a customer requirement for increased visibility.

The pattern of data in an additional cross-tabulation with weapon system category suggested that electronics contracts had lower CWBS reporting levels than did contracts for other types of weapon systems. These data are not shown.

Government and contractor business managers also were asked their opinions regarding whether the CWBS reporting levels on their contracts were appropriate. Government business managers were asked whether the CWBS level was appropriate "for meaningful contract analysis (GBM-17)". Contractor business managers were asked whether the "depth" of reporting was appropriate (CBM-17). The responses are shown in Table 6.5.

TABLE 6.5
OPINION REGARDING CWBS REPORTING LEVEL

CWBS Reporting Level Depth	Government Bus. Mgr.	Contractor Bus. Mgr.
	%	%
Too Low	6	21
Just About Right	83	77
Too High	11	2
TOTAL	100	100

The numerical values in this table show the percent of respondents voicing the opinion indicated. Government business managers were asked their opinion with reference to the CWBS level needed for "meaningful contract analysis". Contractor business managers were asked their opinion solely with reference to the reporting level "depth" within the CWBS. For both categories of respondents, those who selected "No opinion" are not included in this table.

Most respondents felt that the CWBS reporting levels were "Just about right" (83% for government respondents and 77% for contractor respondents, as shown).

However, differences in needs and perceptions between the government and contractor respondents are apparent in the percentage differences for the responses of "Too low" and "Too high".

Cross-tabulations (GBM-16 and 17) (not shown) indicated that for the 11% of the government business managers who indicated the CWBS level was "Too high" for meaningful analysis, 88% indicated their CWBS reporting level as level 3 or higher. The remaining 12% were at CWBS level 4. For the 21% of contractor business managers who indicated that the depth of reporting was "Too low", cross-tabulations (CBM-16 and 17) (not shown) showed that 96% indicated their CWBS reporting level as level 4 or lower. The remaining 4% were at CWBS level 3.

To further explore perceptions of potentially excessive reporting, contractor business managers were asked to indicate the extent to which they believed the requested data was excessive (extremely excessive, somewhat excessive or not excessive) for each CPR format (CBM-19). Their responses are shown in Table 6.6.

TABLE 6.6
CONTRACTOR PERCEPTIONS OF CPR DATA EXCESSIVE TO DOD NEEDS

Extent of Data Being Reported	CPR Formats				
	Contract WBS	Funct'l Urg'n	Baseline	Manpower	Problem Analysis
	%	%	%	%	%
Excessive	27	18	20	23	44
Not Excessive	73	82	80	77	56
TOTAL	100	100	100	100	100

The numerical values in this table show the percent of contractor business manager respondents who indicated that they believed the data being requested for each format was excessive or not excessive. The responses showing "excessive" are for combined evaluations of extremely excessive and somewhat excessive.

It is apparent from the data that most contractor business managers do not believe that the CPR data being submitted is excessive to the DOD program office's needs. However, it is also apparent that more respondents feel the Problem Analysis format, more than other formats, contains excessive data.

From cross-tabulations (not shown), a majority of the respondents (53%) feel that Problem Analysis is excessive on development type contract while only 33% feel that Problem Analysis is excessive on production contracts.

Regarding government business manager assessment of their own needs, these managers were asked whether the number of CPR pages (not solely submitted at the contractor's choice) could be reduced without hampering the government program office's ability to manage the contract (GBM-19 and 20). Seventeen percent (17%) indicated that the number of pages could be reduced. Thirty-three percent (33%) of this 17% (or less than 6% of the original number of respondents) indicated that more than 20% of the pages could be reduced (GBM-21).

Based on cross-tabulations (GBM-17 and 18) (not shown), only 10% of all government business managers who indicated that CPK pages could be reduced also indicated that their CWBS reporting level was "Too low". This appears to suggest that the "excess" pages are not necessarily related to CWBS reporting levels.

From these government business manager data, it appears that most of the CPK information is felt to be needed by its recipients. Since reduction of what is not needed would appear to be under the control of the government program office, it is not clear why the apparently unneeded information is being received. Possible explanations include: different views by other people in the program office regarding the need for the information; no evident cost savings; lower priority for getting the information reduced than for other things to be done; and the possibility that such information might be needed in the future.

6.3.2 Volume of Internal Contractor Reports

Contractor business managers were asked whether the number of pages of internal reports generated each month from their C/SCSC-accepted system could be reduced without hampering their ability to manage the contract (CBM-20). Those respondents who indicated that the number of pages could be reduced were further asked to give a rough estimate of the percentage of pages that could be eliminated (CBM-21). The combined responses (CBM 20 and 21) are shown in Table 6.7.

TABLE 6.7

INTERNAL PAGES THAT COULD BE REDUCED

<u>Internal Report Pages That Could be Eliminated</u>	<u>Contractor Bus. Mgr.</u>
<u>%</u>	<u>%</u>
None	35
1 - 10	10
11 - 20	20
21 - 30	22
31 or More	13
<u>TOTAL</u>	<u>100</u>

The numerical values in this table show the percent of contractor business managers that indicated the percent of internal report pages as shown, that could be eliminated without hampering their ability to manage the contract.

Most contractor business managers (65%) feel that some reductions can be made in the number of pages of internally generated reports from their C/SCSC-accepted systems without hampering their ability to manage their contracts. Included within this majority are 35% who feel that the number of pages can be reduced by 21% or more. This could represent a substantial volume of internal reports.

Contractor business manager responses regarding excess internal reports were cross-tabulated with contractor business manager perceptions of whether the benefits of C/SCSC outweighed its costs (Table 1.4), and with contractor business manager approximations of the cost of system operation (Table 1.8).

Overall, 55% of the contractor business managers agreed that the benefits of C/SCSC outweighed its costs (as shown in Table 1.4). However for those who indicated that none of their internal report pages could be reduced, 70% agreed that the benefits of C/SCSC outweighed its costs. For those who indicated that 1-20% of the pages could be eliminated, 64% agreed that the benefits outweighed the costs; but for those who indicated that 21% or more of their pages could be eliminated, only 31% agreed that the benefits outweighed the costs. The pattern of these data suggests that contractor perceptions of the "benefit versus cost" of C/SCSC are related to assessments of excessive internal reports, with particularly unfavorable impact when the estimate of excessive pages is 21% or more.

Cross-tabulations with the cost of system operation showed very little apparent difference in cost between respondents who indicated that pages could be reduced and respondents who indicated that pages could not be reduced (CBM-20). However, for respondents who indicated that pages could be reduced (CBM-21), the data suggests apparent differences between those who assess the volume of excess pages as 1-20% and those who assess the volume of excess pages as 21% or more. For example, the majority of contractor business managers who indicated that 1-20% of their pages could be eliminated (50%) approximated the cost of operation as 10 man-years per year or less. The majority of contractor business managers who indicated that 21% or more of their pages could be eliminated (62%) approximated the cost of operation as 11 man-years per year or more. The data appears to suggest that where the estimated number of internal report pages that could be eliminated is 21% or more, the approximated number of man-years per year spent on operating the C/SCSC-accepted system is also higher.

Contractor business manager opinions regarding excess internal reports were also tabulated against their perceptions of excess CPR data being provided to the DUD program offices (CBM-19 and 20). The results of these tabulations are shown in Table 6.8.

TABLE 6.8
EXCESS INTERNAL VERSUS EXTERNAL DATA

Believe that CPR Data is Excessive	Internal Report Pages Could be Reduced Without Hampering Contractor's Ability to Manage		
	Yes %	No %	Overall %
CPR Formats			
Contract WBS	32	19	27
Functional Organization	23	11	18
Baseline	26	7	20
Manpower	28	14	23
Problem Analysis	51	29	44

The numerical values in this table indicate the percent of contractor business manager respondents who indicated that they believed the CPR data requested were excessive.

The pattern of data suggests that for contractors who feel their internal report pages can be reduced without hampering their ability to manage, there is a higher percentage (than for those who do not feel their internal reports can be reduced) who also feel that CPR data is excessive to government needs. For example, 51% of those who believe that their internal reports can be reduced also feel that the CPR Problem Analysis format contains data which is excessive to government needs. By comparison, only 29% of the contractors who believe their internal reports cannot be reduced feel the CPR Problem Analysis format contains data which is excessive to government needs.

In general, the data appears to suggest that contractors' perceptions of government needs for CPR data are related to whether the contractors believe they are generating internal reports in excess of their own needs.

6.3.3 Timeliness of Cost Performance Reports (CPRs)

Government business managers were asked approximately how many calendar weeks after the close of the contractor's reporting period are CPRs received (GBM-22). Similarly, contractor business managers were asked approximately how many calendar weeks after the close of their reporting period do they forward their CPRs to the government (GBM-25). The responses are shown in Table 6.9.

TABLE 6.9
CPR TRANSMITTAL DATE

Calendar Weeks After Close of Reporting Period		Government Bus. Mgr. Received	Contractor Bus. Mgr. Forwarded
At Least	Less Than	%	%
-	2	5	1
2	3	7	22
3	4	36	54
4	5	32	19
5	-	20	4
TOTAL		100	100

The numerical values in this table show the percent of respondents who indicated, in number of calendar weeks after the reporting period closeout, when the CPR was forwarded to or received by the government program office.

Most CPRs are forwarded to the government within four (4) weeks after the close of the contractor's reporting period (77%). Most CPRs are received by government program offices within five (5) weeks after the close of the contractor's reporting period (80%).

These responses were cross-tabulated by military department. (Note: The military departments are identified in the following tables and discussion as Departments A, B, and C. This was done to preclude focusing on the specific military departments, rather than the conclusion that follows. The association of the specific military department with the data should not affect the subsequent conclusion.) The results are shown for government business managers in Table 6.10. (Results by military department for contractor business managers reasonably agreed with the results for government respondents, except for a "forwarding" lead-time similar to that indicated in Table 6.9).

TABLE 6.10
CPR RECEIPT DATE BY MILITARY DEPARTMENT

<u>Calendar Weeks After</u> <u>Close of Reporting Period</u>		<u>Government Business Manager</u>		
<u>At Least</u>	<u>Less Than</u>	<u>A</u>	<u>B</u>	<u>C</u>
<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>
-	2	-	2	9
2	3	-	10	9
3	4	28	21	51
4	5	44	30	26
5	-	28	37	5
TOTAL		100	100	100

The numerical values in this table show the percent of respondents who indicated, in number of calendar weeks after the reporting period closeout, when the CPR was received by the program office. A, B, and C represent the three (3) military departments.

Based on the data, Department C programs appear to receive their CPRs earlier than the other services. For example, 69% of the Department C CPRs are received within four (4) weeks while only approximately 30% are received by the other services within the same time-period.

Government program managers and business managers were asked if they agreed or disagreed with the statement that CPRs are received on a sufficiently timely basis so as to be useful to the program office (GPM-15 and GBM-30). The results are shown by military department in Table 6.11. The data shows the percentage of respondents who agreed with the statement.

TABLE 6.11
ASSESSMENT OF CPR TIMELINESS

<u>CPR is Sufficiently Timely so as to be Useful Military Department</u>	<u>Government</u>	
	<u>Prog. Mgr.</u>	<u>Bus. Mgr.</u>
	<u>%</u>	<u>%</u>
A	24	51
B	38	61
C	58	67
<hr/>		
Overall	43	61

The numerical values in this table indicate the percent of respondents, by military department, that agreed with the statement that the CPR is sufficiently timely.

While most government business managers appear to be satisfied with CPR timeliness, most government program managers are not satisfied. There also appears to be differences between the military departments. Department C managers appear to be more satisfied with the timeliness of CPRs than their counterparts in other services. The difference in the level of agreement between the Department A and C program managers is statistically significant at the 95% confidence level.

As shown earlier from Table 6.10, a majority of Department C business managers (69%) indicated that they received their CPRs within four (4) weeks. From the same table, it takes between four (4) and five (5) weeks within the other services to achieve the same approximate percentage (72% for Department A and 63% for the Department B). It therefore appears that CPRs should be received within four (4) weeks for program managers to feel that CPRs are sufficiently timely.

CPR receipt dates were cross-tabulated with government business manager responses regarding whether the CPR was sufficiently timely to be useful (G60-22 and 30). The results are shown in Table 6.12.

TABLE 6.12

CPR TIMELINESS VERSUS CPR RECEIPT DATE

<u>Calendar Weeks After Close of Reporting Period</u>		<u>Government Business Managers Who Agreed That CPR was Sufficiently Timely</u>
<u>At Least</u>	<u>Less Than</u>	<u>%</u>
-	2	100
2	3	70
3	4	63
4	5	55
5	-	52
Overall		61

The numerical values in this table show the percent of government business managers who agreed that the CPR was sufficiently timely to be useful, for each CPR receipt date indicated.

While the majority of government business managers appear to feel that the CPR is sufficiently timely to be useful over the entire range of receipt dates, there is much higher agreement for the earlier receipt dates.

6.3.4 Timeliness of Internal Contractor Cost/Schedule Reports

Contractor business managers were asked approximately how many weeks after the close of their monthly reporting period that C/SCSC-related reports were provided to their Cost Account Managers (CBM-24). The responses are shown in Table 6.13.

TABLE 6.13
INTERNAL REPORTS TRANSMITTAL DATE

<u>Calendar Weeks After Close of Reporting Period</u>		<u>Contractor Business Manager</u>		
<u>At Least</u>	<u>Less Than</u>	<u>Demonstration</u>	<u>SAR</u>	<u>Overall</u>
		<u>%</u>	<u>%</u>	<u>%</u>
-	1	16	28	25
1	2	56	48	50
2	3	19	15	16
3	-	9	9	9
TOTAL		100	100	100

The numerical values in this table show the percent of respondents who indicated, in number of calendar weeks after the reporting period closeout, when C/SCSC-related reports were provided to their Cost Account Managers.

Most contractors (75%) provide internal C/SCSC-related reports to their cost account managers within two (2) weeks after the reporting period cutoff date. The percentages of contractors who provide the reports within the first week (16% for contractors who had undergone demonstrations and 28% for contractors who had undergone SARs) appear to indicate that contractors who had undergone demonstrations take longer to provide the reports than those who had undergone SARs. This result appears reasonable, since contractors who had undergone SARs would be likely to have had more experience with their C/SCSC-accepted systems.

Contractor program and business managers were asked whether they agreed that their internal cost and schedule reports were received on a sufficiently timely basis to be useful to them (CPM-19 and CBM-29). Most managers in both categories agreed that their internal reports were timely (72% for contractor program managers and 74% for contractor business managers).

The dates that internal reports were provided to cost accounts managers were cross-tabulated with contractor business manager responses regarding whether the reports were sufficiently timely to be useful (CBM-24 and 29). The results are shown in Table 6.14.

TABLE 6.14
INTERNAL REPORT TIMELINESS VERSUS RECEIPT DATE

<u>Calendar Weeks After Close of Reporting Period</u>		<u>Contractor Business Managers Who Agreed That Internal Cost/Schedule Reports Were Sufficiently Timely</u>
<u>At Least</u>	<u>Less Than</u>	<u>%</u>
-	1	85
1	2	76
2	3	73
3	-	25
<hr/> Overall		<hr/> 74

The numerical values in this table show the percent of contractor business managers who agreed that internal cost/schedule reports were sufficiently timely to be useful, for each receipt date indicated.

The data appear to suggest that most contractor business managers consider their internal cost/schedule reports sufficiently timely to be useful when the reports are provided to their cost account managers within three (3) weeks after the close of the reporting period.

6.3.5 Cost Performance Report (CPR) Use

Government business managers were asked to what extent their program offices routinely review CPRs each month (GBM-18). The selections and responses for each selection are shown in Table 6.15.

TABLE 6.15
EXTENT OF ROUTINE CPR REVIEW

<u>Extent of CPR Review</u>	<u>Government Bus. Mgr. %</u>
Entire Report	74
Only Certain Formats	20
Only for Exceeded Thresholds	4
Do Not Review Report	2
TOTAL	100

The numerical values in this table show the percent of government business managers who selected the choices shown, for the extent of their CPR reviews.

As shown in the data, most government business managers indicate that their program offices review the CPR each month in its entirety.

Government business managers also were asked how many calendar weeks elapse from the time CPRs are received until the reviews and analyses within the program office are completed (GBM-23). The responses are shown in Table 6.16.

TABLE 6.16

ELAPSED TIME FROM RECEIPT OF CPR TO COMPLETION OF CPR REVIEW

<u>Calendar Weeks To Perform CPR Review</u>		<u>Government Bus. Mgrs. Analysis Complete</u>
<u>At Least</u>	<u>Less Than</u>	<u>%</u>
-	1	18
1	2	46
2	3	21
3	4	7
4	-	8
TOTAL		100

The numerical values in this table show the percent of government business managers who indicated, in number of calendar weeks after receipt, when their CPR review and analyses were completed.

Most government business managers (64%) indicated that their CPR analysis was completed within two (2) weeks after receipt of the CPR.

The amount of time to complete CPR reviews (Table 6.16) was cross-tabulated with government business managers' ratings of how well (excellent, good, fair, poor, or no opinion) the CPR helps to determine cost status and estimates-at-completion (Table 1.3). The results are shown in Table 6.17. Percentages are shown for combined ratings of "excellent" and "good".

TABLE 6.17
TIME TO COMPLETE CPR REVIEW VERSUS RATING OF CPR

Contract-Related Status	Calendar Weeks to Perform CPR Review		
	Less Than 2	2 or More	Overall
	%	%	%
Cost Status	93	65	83
Estimates-at-Completion	69	60	60

The numerical values in this table show the percent of government business managers who rated the CPR as "excellent" or "good" in helping to determine contract-related status.

As might be anticipated, for program offices that complete their CPR reviews more quickly (in less than 2 weeks, rather than 2 weeks or more), a greater percentage of business managers apparently rate their CPRs as good-to-excellent (in helping to determine contract status).

To approximate the amount of elapsed time that completion of CPR analysis represents in relation to the cutoff date of the cost/schedule information being reviewed, the results of Table 6.1b were cross-tabulated with the number of calendar weeks after the contractor's cutoff date that the CPR was received (Table 6.9). The results of this tabulation are shown in Table 6.18. (Note: The scale for this table is shown in two-week increments, and the increments overlap. This is the result of the way the scales are constructed in the questions/responses (GBM-22 and GBM-23) being cross-tabulated.)

TABLE 6.18

ELAPSED TIME FROM CLOSE OF REPORT PERIOD TO COMPLETION OF CPR REVIEW

Calendar Weeks After Close of Contractor's Accounting Period		Government Bus. Mgr. Analysis Complete
At Least	Less Than	%
-	2	1
1	3	1
2	4	3
3	5	11
4	6	21
5	-	29
6	-	22
7	-	12
TOTAL		100

The numerical values in this table show the percent of government business managers who indicated, in number of calendar weeks, when CPRs were received and when the review and analyses were completed.

Most program offices apparently do not complete their CPR reviews until after the following report period's cutoff. It appears that at least 84% of the program offices do not complete their analyses until at least four (4) weeks after the cutoff; and at least 63% do not complete their analyses until at least five (5) weeks after the cutoff. This result is the combination of the length of time to receive the reports and the length of time to complete the reviews and analyses of the reports.

Government business managers were asked to approximate the monthly number of total program office man-days spent on collecting, reviewing, analyzing and summarizing information contained in CPRs (G&M-24). The responses are shown in Table 6.19, differentiated by contract value.

TABLE 6.19
PROGRAM OFFICE MAN-DAYS USED FOR MONTHLY CPR ANALYSIS

Monthly Manpower Used for CPR Analysis	Contract Values			
	Less Than \$40 Million	At least \$40 Million but less than \$160 Million	\$160 Million or more	Overall
Man-days	%	%	%	%
Less Than 1	5	5	3	4
1 - 4	67	44	28	41
5 - 9	19	29	25	25
10 - 14	9	13	27	19
15 or More	0	9	17	11
TOTAL	100	100	100	100

The numerical values in this table show the percent of government business managers who indicated, in number of man-days, the manpower used for CPR analysis of their contract.

It is apparent from the data that the number of man-days used for CPR reviews and analyses varies substantially. The pattern of the data also suggests that the number of man-days used for CPR analysis increases in relation to increasing contract value. For example, with contracts valued at less than \$40 million, 72% of the respondents indicated that four (4) man-days or less were used each month. For contracts valued at approximately \$40-160 million, only 49% of the respondents indicated that four (4) man-days or less were used each month for CPR analyses; while 51% indicated that five (5) man-days or more were used. For contracts valued at \$160 million or more, 69% indicated that five (5) man-days or more were used each month for CPR analyses.

Government program managers were asked how often they personally reviewed the cost/schedule status of their contracts based on CPRs or data derived from CPRs (GPM-8). They were also asked how often they used this information in either briefings or written reports to higher headquarters (GPM-9). The responses are shown in Table 6.20.

TABLE 6.20
PROGRAM MANAGER USE OF CPR DATA

Frequency	Government Program Managers	
	Personally Review %	Used for Higher Headquarters %
More Often Than Monthly	17	8
Monthly	68	36
Bimonthly	6	9
Quarterly	5	32
Less Often Than Quarterly	3	10
Never	1	5
TOTAL	100	100

The numerical values in this table show the percent of government program managers who personally review CPR-derived data and who use CPR-derived data for higher headquarters, for the frequencies shown.

Most government program managers (85%) indicated that they personally reviewed cost/schedule data derived from CPRs on a monthly or more frequent basis. The same percentage (85%) indicated that they used information derived from CPRs for briefings or written reports to higher headquarters on a quarterly or more frequent basis.

Government program managers also were asked if they regularly used other reports or other means in lieu of CPR-derived data in order to determine contract cost/schedule status (GPM-6). The majority (57%) indicated that they did not use other reports or other means. However, a substantial percentage (43%) indicated that they did use other reports or means.

The response to this question was a key discriminator for responses to numerous government program manager questions relating to perceptions and assessments towards C/SCSC and CPRs. For example, respondents who indicated they used other reports or other means in lieu of CPR-derived data in order to determine contract cost/schedule status had ratings and favorable perceptions towards C/SCSC and CPRs that were always lower than for those who did not use other reports or means. This difference was frequently significant at the 95% confidence level.

Contractor business managers were asked how effectively (very effectively, somewhat effectively, or not at all effectively) the DUD program office to which they submitted their CPR used the data (CBM-18). For those who indicated an opinion, 88% responded that the DUD program office used the data effectively, while only 12% responded "not at all effectively".

6.3.6 Contractor Use of Internal Cost/Schedule Reports

Contractor program managers were asked how often they personally reviewed reports of any type either generated directly by their C/SCSC-accepted system or derived from their system (CPM-8). Contractor business managers were asked how often their company program manager personally reviewed these reports (CBM-23). The results are shown in Table 6.21.

TABLE 6.21

PROGRAM MANAGER REVIEW OF C/SCSC-RELATED REPORTS

Frequency	Contractor Program Manager Personally Reviews Reports	
	According to Prog. Mgr.	According to Bus. Mgr.
	%	%
Daily	4	3
Weekly	46	40
Biweekly	10	12
Monthly	39	45
Quarterly	1	0
TOTAL	100	100

The numerical values in this table show the percent of contractor program managers who personally review reports generated or derived from their C/SCSC-accepted systems, for the frequencies shown.

Most contractor program managers (60%) indicated that they personally review C/SCSC-related reports of any type on a biweekly or more frequent basis. Nearly 100% indicated that they personally review such reports on a monthly or more frequent basis.

Contractor program managers were asked if they regularly used other reports or other means in lieu of using C/SCSC-driven internal cost and schedule reports in order to determine the cost and schedule status of their contracts (CPM-6). The majority (54%) indicated that they did use other reports or other means.

Like the response by government program managers to a very similar question (whether they regularly used other reports or means in lieu of CPR-derived data), the contractor program manager response to this question was a discriminator for their responses to numerous other questions relating to perceptions and assessments towards C/SCSC and CPRs. For contractor program managers who indicated they used other reports or means to determine the cost and schedule status of their contracts, ratings and favorable perceptions towards C/SCSC and CPRs were normally lower than for those who did not use other reports or means. This difference was frequently significant at the 95% confidence level.

Contractor business managers were asked if their company had an in-house recurring training program for managers on how to use internal reports from their C/SCSC-accepted system (CBM-36). Most of the respondents (71%) indicated that their company did have such a training program.

6.4 Summary

Based on the respondent data, we conclude that:

- The lowest CWBS level regularly reported on CPRs for most contracts was CWBS level 3 or higher. However, many CPRs had lower level reporting. Factors which related to differences in the depth of CWBS reporting levels appeared to include the type of contract work (i.e., development or production), the contract value, and whether the contract was cost-plus or fixed-price incentive. Most government and contractor business managers felt that their CWBS reporting levels were "just about right".
- While most contractor business managers did not believe that excessive CPR data was being requested, it was apparent that they felt the Problem Analysis format, more than other formats, contained excessive data. Most government business managers indicated that the number of CPR pages could not be reduced without hampering their ability to manage the contract.
- For internally generated contractor cost/schedule reports, most contractor business managers felt that some reductions could be made in the number of pages being generated, without hampering their ability to manage their contracts. Some contractor business managers felt that substantial reductions could be made. In addition, the data appeared to suggest that contractor business

manager perceptions of government needs for CPR data were related to whether the contractor business managers believed that they, themselves, were generating internal reports in excess of their own needs.

- Most CPRs are forwarded to the government within four (4) weeks after the close of the contractor's accounting period. Most CPRs are received by government program offices within five (5) weeks after the close of the contractor's accounting period. While most government business managers appear to be satisfied with CPR timeliness, most government program managers are not satisfied. It appears from the data that CPRs should be received within four (4) weeks for government program managers to feel that the reports are sufficiently timely.
- For contractor internal C/SCSC-related reports, most contractors provided the reports to their cost account managers within two (2) weeks after the reporting period cutoff date. More than one-fourth of the contractors who had undergone SARs indicated that these reports were provided within the first week. Most contractor program and business managers agreed that their internal cost and schedule reports were sufficiently timely to be useful to them. The data also suggested that most business managers considered their internal cost/schedule reports sufficiently timely to be useful when the reports were provided to their cost account managers within three (3) weeks after the close of the reporting period.
- Most government business managers indicated that their program offices reviewed the CPR each month in its entirety. Most government business managers also indicated that their CPR analyses were completed within two (2) weeks after receipt of the CPR. For government business managers whose program offices complete their analyses within two (2) weeks, rather than two (2) weeks or more, a greater percentage apparently rate their CPRs as more helpful in determining contract status. Most program offices do not complete their CPR reviews until after the following report period's cutoff. This result is the combination of the length of time to receive the reports and the length of time to complete the analyses.
- The monthly number of total program office man-days used for CPR analyses appeared to vary with contract value. For contracts valued at less than \$40 million, most government business managers indicated that four (4) man-days or less were used. For contracts valued at approximately \$40-160 million, approximately one-half of the government business managers indicated four (4) man-days or less and one-half indicated five (5) man-days or more. For contracts valued at \$160 million or more, most government business managers indicated five (5) man-days or more were used each month for CPR analyses.
- Most government program managers indicated that they personally reviewed cost/schedule data derived from CPRs on a monthly or more frequent basis. Most government program managers also indicated that they used information derived from CPRs for briefings or

written reports to higher headquarters on a quarterly or more frequent basis. A majority of government program managers indicated that they did not use other means in lieu of CPR-derived data in order to determine contract cost/schedule status.

- Most contractor business managers felt that the DOD program office to which they submitted their CPR used the data effectively.
- Most contractor program managers review C/SCSC-related reports of any type on a biweekly or more frequent basis. Nearly 100% review such reports on a monthly or more frequent basis. However, a majority of contractor program managers indicated that they regularly used other means in lieu of using their C/SCSC-driven internal reports to determine the cost and schedule status of their contracts. Most contractor business managers indicated that their companies had in-house recurring training programs for their managers on how to use internal reports from their C/SCSC-accepted systems.

7.0 C/SCSC SURVEILLANCE

7.1 Background

C/SCSC surveillance is frequently cited as a concern. It is an activity that is sometimes thought of as "in-between" the government program office and the contractor.

C/SCSC surveillance is the responsibility of the cognizant contract administration office, with assistance by the resident DCAA office. Surveillance people must interface with both the government and contractor program office people. To be effective, surveillance people should have the confidence and support of the government program office and the professional respect and cooperation of the contractor.

Surveillance is normally classified in two (2) phases. Prior to completion of the demonstration process and C/SCSC-acceptance of the contractor's system, the in-plant surveillance effort is primarily associated with assisting in the C/SCSC review process and with the resident monitoring of contractor progress. For the second phase, which is subsequent to completion of the demonstration process and C/SCSC-acceptance, in-plant government surveillance should assume the more predominant role through recurring evaluations of the contractor's system. The purpose is to assure that the system continues to operate properly.

7.2 Overview of Related Questions

In our examination of C/SCSC surveillance, we included questions which addressed perceptions and assessments in the three (3) areas listed below. Respondents were government program and business managers and contractor business managers, depending on the specific question.

- Government program office perceptions regarding in-plant C/SCSC surveillance effectiveness.
- Assessments regarding frequency of C/SCSC surveillance monitor contact with the company.
- Contractor perceptions regarding the level of priority and degree of expertise for C/SCSC, within the government plant representative offices.

7.3 Results

7.3.1 C/SCSC Surveillance Effectiveness

Government program and business managers were asked if they agreed that non-program office plant representatives such as DCAS, DCAA, NAVPROS, etc., do a reasonably good job of C/SCSC surveillance (GPM-17 and GBM-32). The results are shown in Table 7.1.

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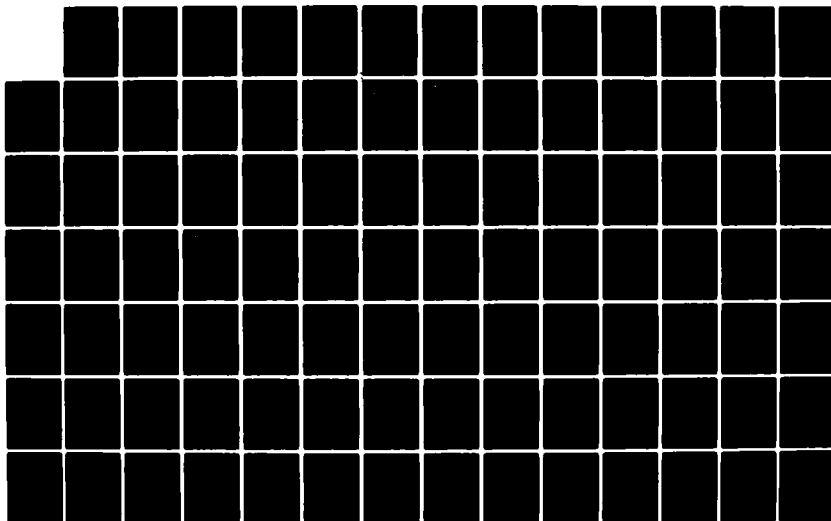
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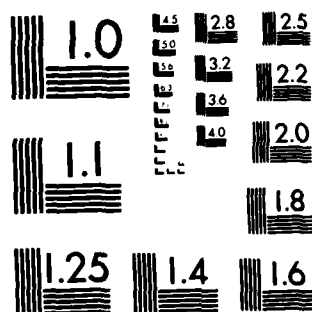
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TABLE 7.1

C/SCSC SURVEILLANCE EFFECTIVENESS

<u>Non-Program Office Plant Representatives Do a Reasonably Good Job of C/SCSC Surveillance</u>	<u>Government</u>			
	<u>Prog. Mgr.</u>	<u>Business Manager</u>		
	<u>Overall</u>	<u>Demonstration</u>	<u>SAR</u>	<u>Overall</u>
	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>
Agree	68	59	79	73
Disagree	26	33	18	22
Neither Agree Nor Disagree	6	8	3	5
TOTAL	100	100	100	100

The numerical values in this table show the percent of respondents who agreed or disagreed regarding whether non-program office plant representatives did a reasonably good job at C/SCSC surveillance. In addition, business manager responses are differentiated by whether their contract had undergone a demonstration or SAR.

Most government program and business managers agreed that non-program office plant representatives do a reasonably good job at C/SCSC surveillance (68% for program managers and 73% for business managers). The responses from government business managers also appear to suggest stronger agreement that plant representatives do a reasonably good job at surveillance when their contracts have undergone SARs, rather than demonstrations. This would normally occur when contractors have previously accepted systems, i.e., during the second phase of surveillance (when the in-plant activity normally assumes a more predominant role).

7.3.2 Frequency of Contact Between the Government C/SCSC Surveillance Monitor and the Company

Contractor business managers were asked how frequently the government C/SCSC surveillance monitor has contact with the company (CBM-35). The results are shown in Table 7.2.

TABLE 7.2
GOVERNMENT C/SCSC SURVEILLANCE MONITOR INTERFACE WITH COMPANY

<u>C/SCSC Surveillance Monitor's Frequency of Contact With the Company</u>	<u>Contractor Business Manager</u>	
	<u>Demonstration</u>	<u>SAR</u>
	<u>%</u>	<u>%</u>
Daily	15	22
Weekly	26	28
Monthly	48	39
Less Often Than Monthly	11	11
<hr/> TOTAL	<hr/> 100	<hr/> 100

The numerical values in the table show the percent of contractor business managers who indicated the C/SCSC surveillance monitor's frequency of contact with the company, as shown. The base does not include the respondents who answered "Don't Know".

Most of the contractor business managers (89%) indicated that the government C/SCSC surveillance monitor had monthly or more frequent contact with the company. For contracts which had undergone SARs (contractors with previously accepted systems and in the second phase of surveillance), 50% of the contractor business managers indicated that the government C/SCSC surveillance monitor had weekly or more frequent contact with the company. For contracts which had undergone demonstrations, only 41% indicated this same frequency of contact. These results suggest that for contractors with previously accepted systems and in the second phase of surveillance, the frequency of contact by the government C/SCSC surveillance monitor is greater than for contractors that have just undergone demonstrations. This appears consistent with the anticipated roles of surveillance people -- being more predominant after system acceptance or during the second phase of surveillance.

7.3.3 Government In-Plant C/SCSC Priority and Expertise

Contractor business managers were asked if they agreed that in-plant government representatives have a variety of responsibilities, with C/SCSC usually being low in priority (CBM-27). They also were asked if they agreed that in-plant government people do not have much, if any, C/SCSC expertise (CBM-28). The results are shown in Table 7.3.

TABLE 7.3
GOVERNMENT IN-PLANT C/SCSC PRIORITY AND EXPERTISE

Statements Regarding Government In-Plant C/SCSC Activities	Contractor Business Manager		
	Demonstration	SAR	Overall
	%	%	%
Usually Low in Priority	58	41	47
People Do Not Have Much Expertise	64	39	45

The numerical values in this table show the percent of contractor business managers who agreed with the statement as shown.

For contracts which had undergone SARs (systems previously accepted as C/SCSC-compliant and in the second phase of surveillance), less than the majority of contractor business managers (41%) agreed that in-plant government representatives had a variety of responsibilities with C/SCSC usually being low in priority; and less than the majority (39%) agreed that in-plant government people did not have much expertise in C/SCSC. However, for contracts which had just undergone demonstrations, the majority agreed that C/SCSC was usually low in priority (58%) and that the people did not have much expertise (64%). The differences in both cases show more favorable perceptions of the in-plant government C/SCSC activity for contracts which had undergone SARs (during the second phase of surveillance) than for contracts which had undergone demonstrations. These differences are statistically significant at the 95% confidence level.

The less favorable perceptions of the in-plant C/SCSC surveillance activity during the earlier phase of surveillance may be due to such factors as an apparently more subordinate role being played during this phase and a real lack of expertise which becomes remedied as the review process progresses.

7.4 Summary

Based on the respondent data, we conclude that:

- Most government program and business managers agree that government plant representatives do a reasonably good job at C/SCSC surveillance. Agreement appears to be stronger when contractors are more likely to have previously accepted systems and surveillance has a more predominant role.

- Most C/SCSC surveillance monitors have at least monthly contact with company representatives. For contractors with systems previously accepted as C/SCSC-compliant or in the second phase of surveillance, it appears that approximately one-half of the surveillance monitors have at least weekly contact, while about 20% to 25% of surveillance monitors have daily contact.
- For contractors with previously accepted systems or in the second phase of surveillance, less than the majority of contractor business managers felt that in-plant government C/SCSC surveillance was low in priority and that in-plant government people were lacking in C/SCSC expertise. For contractors that had just undergone the demonstration process, the contractor business managers felt differently. They felt that C/SCSC was low in priority and that the in-plant government people were lacking in C/SCSC expertise. This would appear to reflect such factors as an apparently more subordinate role of surveillance during the earlier phase and a real lack of expertise which becomes remedied as the review process progresses.

SECTION IV - CONCLUSIONS

INTRODUCTION

These Phase I survey conclusions follow directly from the results and summaries contained in Section III of this report. Although recommendations are not included within this report, recommendations have been developed for the Phase II portion of the survey. The recommendations for Phase II are focused towards respondent concerns identified in these conclusions.

1.0 COST AND BENEFIT

C/SCSC-accepted systems are considered to be effective in assisting to control cost and schedule performance.

C/SCSC-accepted systems are considered to be effective by a large majority of the respondents (71% for contractor program managers and 80% for government business managers). A large majority of contractor program managers (74%) and government program managers (77%) also perceive that a major benefit of C/SCSC is more thorough contractor planning than otherwise would be accomplished.

CPRs and related internal contractor reports are considered to be accurate. CPRs are considered most useful for determining contract cost status.

Over 90% of the contractor program and business managers considered their CPRs to be accurate. Most government business managers (80%) also agreed that their contractor's internal data provides valid information. Approximately 75-80% of the respondents considered CPRs and related internal reports as good-to-excellent in helping to determine contract cost status. A majority (50% or more) of government business managers and contractor program managers also considered these reports as helpful for estimates-at-completion, determining cost impacts of known problems, and tracing problems to their sources. CPRs are not as helpful, however, in these areas to government program managers.

C/SCSC benefits are considered to outweigh the costs. Nevertheless, most contractor program managers see a need for minor modifications to their systems. Many government program managers agree.

All four categories of managers agreed (ranging from 53% to 62%) that C/SCSC benefits to themselves outweighed its associated cost. However, the strength of this belief was less than that relating solely to C/SCSC effectiveness. When program managers are given the choice of whether they would require or use current C/SCSC-accepted systems as is, or with some modification, more government program managers (39%) than contractor program managers (21%) would require or use these systems as is. Nevertheless, a plurality of government program managers (41%) and a majority of contractor program managers (57%) perceive the need for at least some minor system modifications. The great majority of both government (80%) and contractor program managers (78%) do not perceive the need for major modifications.

Manpower cost for operating C/SCSC-compliant systems (not the cost of C/SCSC) is approximated as 10 man-years per year or less for nearly half of contracts. Manpower cost appears to vary directly with contract value.

Eighteen percent (18%) of the contractor business managers approximated the cost of operating their C/SCSC-accepted systems (not the cost of C/SCSC) as 5 man-years per year or less. Nearly one-half (46%) approximated this cost as 10 man-years per year or less; while two-thirds (67%) and three-fourths (76%) approximated the cost as 15 and 20 man-years per year or less, respectively. Patterns in the data suggest that perceptions of whether benefits outweigh costs appear to be inversely related to the cost of operating C/SCSC-accepted systems. Additionally the data suggests that these costs vary directly with the dollar value of the applicable contract.

2.0 CRITERIA CONCEPT AND APPROACH

Criteria concept is considered to be valid.

The criteria concept is considered valid by a large majority (ranging from 77% to 88%) of the respondents (government program managers; and contractor program and business managers).

Currently delineated criteria are considered to be appropriate.

Most managers in all four (4) categories (government program and business managers; and contractor program and business managers) considered the currently delineated criteria appropriate as the basis for evaluating contractor systems. While most contractor program (63%) and business managers (69%) considered the criteria appropriate, the percent was not as high as for their counterpart government program (71%) and business managers (77%). In addition, for contractor managers, there appeared to be less agreement that the currently delineated criteria are appropriate than that the criteria concept is valid.

Approach of ensuring system adequacy is considered to be as good or better than other approaches.

A large majority (ranging from 73% to 77%) of the respondents (government program managers; and contractor program and business managers) agreed that the approach of ensuring that an adequate basis exists for keeping the program office informed is as good or better than other approaches to achieving the same objective.

DOD practices in ensuring that contractor systems are adequate are considered to be effective.

A large majority in all four (4) categories (government program and business managers; and contractor program and business managers) considered DOD practices effective in ensuring that an adequate basis exists in a contractor's system for reporting cost/schedule status. While a large majority of contractor program (67%) and business managers (75%) considered DOD practices effective, the percent was not as high as for the government program (74%) and business managers (82%). On a general level, it does not appear that DOD practices are overly specified. Conclusions regarding specific DOD practices as they relate to the C/SCSC review process and depth of reporting are discussed in paragraphs 3.0, 4.0 and 6.0 of this report section.

Perceptions of criteria concept and DOD practices are more favorable for contractors who had undergone Subsequent Application Reviews than for contractors who had undergone Demonstrations.

For the validity of the criteria concept and the effectiveness of DOD practices, contractor business managers have significantly more favorable perceptions after undergoing the Subsequent Application Review process than after undergoing the demonstration process.

3.0 C/SCSC REVIEW PROCESS

Several government organizations participate in the C/SCSC review process.

DOD review teams are normally organized to include participation of the program office, government plant representatives, resident DCAA representatives, service focal point office and commodity command.

Participation of each of these organizations is considered to be necessary.

Most government business managers feel that review team participation is necessary for each of the organizations which currently provide team members. There was nearly unanimous agreement regarding the necessity for program office (99%), contract administration office (97%) and DCAA participation (94%).

Most Demonstrations are completed within three weeks. Most Subsequent Application Reviews (SARs) are completed within one week.

For Demonstrations, approximately one-half of the reviews are completed within two weeks and more than four-fifths are completed within three weeks. Most SARs (approximately 70%) are completed within one week.

The predominant number of review team members is 8-11 persons. Team size appears to be larger for Demonstrations than for SARs.

The predominant number of review team members is 8-11 persons (approximately 40-45% of teams). For Demonstration Reviews, approximately 60% of the respondents indicated the review team size was 11 persons or less. For SARs, approximately three-fourths of the government business managers and two-thirds of the contractor business managers indicated the review team size was 11 persons or less.

There appears to be a greater number of contractor discrepancies identified during Demonstrations than identified during SARs.

For Demonstrations, 10 discrepancies or less (requiring contractor corrective actions) are identified during approximately one-half of the reviews. For SARs, 10 discrepancies or less are identified during approximately two-thirds of the reviews.

Most contractors consider DOD C/SCSC review teams to be doing a good-to-excellent job when evaluating contractor systems.

The majority of contractor business managers feel that DOD review teams do a good-to-excellent job when evaluating their company's C/SCSC application. The largest majorities (approximately 80%) were for the three characteristics of overall effectiveness, leadership and thoroughness. The smallest majorities (approximately 60%) were for the two characteristics of flexibility and technical qualifications.

Contractor manpower costs solely attributable to the C/SCSC review process appear significantly higher in support of the demonstration process than in support of the SAR process.

For costs solely attributable to the conduct of C/SCSC reviews, the contractor business manager responses appear to show that more support is required for the demonstration process than for SARs. For example, 100 man-days or less was estimated for 25% of the demonstration processes and for 53% of the SAR processes.

For contractors who had undergone demonstrations, the benefits of the review process are considered to outweigh the costs. For contractors who had undergone SARs, the costs of the review process are considered to outweigh the benefits.

The majority of contractor business managers (52%; 39% indicated the opposite, and 9% indicated "No opinion") indicated that the benefits to their company of the demonstration process outweigh its costs (costs solely attributable to the reviews). However, for SARs, the majority of contractor business managers (55%; 30% indicated the opposite, and 15% indicated "No opinion") indicated that the benefits did not outweigh the costs.

Government business managers consider the C/SCSC review process to be necessary for the proper functioning of the contractor's cost and schedule control system.

Government business managers were nearly unanimous (98%) in indicating that the C/SCSC review process was necessary. This was true for both the demonstration process and SAR process. Agreement regarding the need for the demonstration process appeared to be slightly stronger than for the SAR process.

4.0 CONSISTENCY OF C/SCSC INTERPRETATION

Contractor business managers consider C/SCSC interpretations by DOD review teams to be consistent.

Most contractor business managers feel that their review team's C/SCSC interpretations were reasonably consistent with other DOD review teams' interpretations. The pattern of the data appears to suggest that there is higher agreement regarding team consistency for those contractors who had undergone SARs (71%) than for those who had undergone Demonstration Reviews (58%). For those respondents who answered "yes" or "no" (rather than "no opinion") regarding whether review teams were reasonably consistent, 79% of those who went through demonstrations and 90% of those who went through SARs answered "yes".

5.0 TIME ALLOWANCES FOR IMPLEMENTING C/SCSC

Most C/SCSC-related performance measurement baselines are established by contractors within six (6) months of contract award. This accomplishment appears to take longer for contracts undergoing demonstrations than for those undergoing SARs.

The C/SCSC-related performance measurement baselines for approximately two-thirds of the contracts were established within six (6) months of contract award. According to contractor business managers, it appears to take longer to establish the baselines for contracts undergoing the demonstration process than for contracts undergoing the SAR process. For example, contractor respondents indicated that for demonstrations, 52% of the baselines were established within six (6) months; while for SARs, 76% were established within six (6) months. Since contractors undergoing SARs should have a previously proven capability for developing a baseline, this should be expected.

C/SCSC-related performance measurement baselines appear to be established earlier when contracts are definitized at contract award. For undefinitized contracts, nearly half have their baselines established prior to definitization.

According to contractor business managers, for contracts that are not definitized at contract award, it appears to take longer to establish the performance measurement baseline than for those contracts that were definitized at contract award. For example, contractor respondents indicated that for contracts definitized at contract award, 82% of the baselines were established within six (6) months; while for undefinitized contracts, only 45% were established within six (6) months. It also appears that somewhat less than half (contractor respondents indicated 46%) of the undefinitized contracts have their baselines established prior to definitization.

Government business managers appear satisfied when C/SCSC-related performance measurement baselines are established within six (6) months of contract award. When baselines take longer to establish, most of the respondents appear to feel it could have been done more quickly.

Most government business managers appear to be satisfied that the elapsed time is reasonable when performance measurement baselines are established within six (6) months of contract award (78% appear satisfied when it takes less than 3-months; and 73% appear satisfied when it takes at least 3-months but less than 6-months). Most government business managers also appear to feel that when baselines take longer than six (6) months, it could have been done more quickly (57% appear to feel it could have been done more quickly when it takes at least 6-months but less than 12-months; and 69% appear to feel this way when it takes 12-months or more).

A negligible number of C/SCSC reviews fall within ninety (90) calendar days from contract award.

A negligible number of C/SCSC reviews (none for demonstrations and 2% for SARs, according to contractor business managers) appear to fall within the ninety (90) calendar day time-frame contained within the DAR C/SCSC clause. Most C/SCSC visits regarded as key by the respondents appeared to occur within eighteen (18) months of contract award for the demonstration process and within twelve (12) months of contract award for the SAR process.

6.0 COST/SCHEDULE PERFORMANCE REPORTING

CWBS level 3 is the lowest level regularly reported on most CPRs. The level of reporting appears to relate to factors such as kind of work, contract value and contract type. Most respondents felt that reporting levels were "just about right".

The lowest CWBS level regularly reported on CPRs for most contracts (69% according to government business managers and 57% according to contractor business managers) was CWBS level 3 or higher. However, many CPRs had lower level reporting. Factors which related to differences in the depth of CWBS reporting levels appeared to include the type of contract work (i.e., development or production), the contract value, and whether the contract was cost-plus or fixed-price incentive. Most government (83%) and contractor business managers (77%) felt that their CWBS reporting levels were "just about right".

Most contractor business managers do not believe that the five (5) CPR formats contain excessive data. Most government business managers indicated that the number of CPR pages could not be reduced.

While most contractor business managers (ranging from 82% to 56%, depending on the specific CPR format) did not believe that excessive CPR data was being requested, it was apparent that they (44%) felt the Problem Analysis format, more than other formats, contained excessive data. Most government business managers (79%) indicated that the number of CPR pages could not be reduced without hampering their ability to manage the contract.

Most contractor business managers felt that some reductions could be made in the number of report pages generated each month from their C/SCSC-accepted systems, without hampering their ability to manage.

For internally generated contractor cost/schedule reports, most contractor business managers (65%) felt that some reductions could be made in the number of pages being generated, without hampering their ability to manage their contracts. Some contractor business managers (35%) felt that substantial reductions (21% or more of the pages) could be made. In addition, the data appeared to suggest that contractor business manager perceptions of government needs for CPR data were related to whether the contractor business managers believed that they, themselves, were generating internal reports in excess of their own needs.

Most CPRs are received within five (5) weeks after the close of the reporting period. Although most government business managers are satisfied with this timeliness, most government program managers are not satisfied.

Most CPRs (77%) are forwarded to the government within four (4) weeks after the close of the contractor's accounting period. Most CPRs (80%) are received by government program offices within five (5) weeks after the close of the contractor's accounting period. While most government business managers (61%)

appear to be satisfied with CPR timeliness, most government program managers (55%) are not satisfied. It appears from the data that CPRs should be received within four (4) weeks for government program managers to feel that the reports are sufficiently timely.

Most internal C/SCSC-related reports are received by cost account managers within two (2) weeks after the close of the reporting period. Most contractor managers consider their reports to be sufficiently timely.

For contractor internal C/SCSC-related reports, most contractors (75%) provided the reports to their cost account managers within two (2) weeks after the reporting period cutoff date. More than one-fourth of the contractors who had undergone SARs indicated that these reports were provided within the first week. Most contractor program (72%) and business managers (74%) agreed that their internal cost and schedule reports were sufficiently timely to be useful to them. The data also suggested that most business managers considered their internal cost/schedule reports sufficiently timely to be useful when the reports were provided to their cost account managers within three (3) weeks after the close of the reporting period.

Most government program offices review CPRs in their entirety. Most government CPR analyses are completed within two (2) weeks after receipt of the CPR. Most CPR analyses are not completed until after the following report period's cutoff date.

Most government business managers (74%) indicated that their program offices reviewed the CPR each month in its entirety. Most government business managers (64%) also indicated that their CPR analyses were completed within two (2) weeks after receipt of the CPR. For government business managers whose program offices complete their analyses within two (2) weeks, rather than two (2) weeks or more, a greater percentage apparently rate their CPRs as more helpful in determining contract status (e.g., 93% versus 65%, respectively in giving a rating of good-to-excellent for determining cost status). Most program offices (at least 63%) do not complete their CPR reviews until after the following report period's cutoff. This result is the combination of the length of time to receive the reports and the length of time to complete the analyses.

Total program office man-days used for CPR analysis is approximated as less than 10 man-days per month for 70% of contracts. Man-days used for analysis of a CPR appears to vary with contract value.

The monthly number of total program office man-days used for CPR analyses appeared to vary with contract value. For contracts valued at less than \$40 million, most government business managers (72%) indicated that four (4) man-days or less were used. For contracts valued at approximately \$40-160 million, approximately one-half of the government business managers indicated four (4) man-days or less and one-half indicated five (5) man-days or more. For contracts valued at \$160 million or more, most government business managers (69%) indicated five (5) man-days or more were used each month for CPR analyses.

Most government program managers personally review CPR-related data at least monthly. Most government program managers use CPR-related information for briefings or reports to higher headquarters at least quarterly.

Most government program managers (85%) indicated that they personally reviewed cost/schedule data derived from CPRs on a monthly or more frequent basis. Most government program managers (85%) also indicated that they used information derived from CPRs for briefings or written reports to higher headquarters on a quarterly or more frequent basis. A majority of government program managers (57%) indicated that they did not use other means in lieu of CPR-derived data in order to determine contract cost/schedule status.

Most contractors feel that DOD program offices effectively use CPR data.

Most contractor business managers (88%) felt that the DOD program office to which they submitted their CPR used the data effectively.

Most contractor program managers personally review internal C/SCSC-related reports at least biweekly. However, most contractor program managers also regularly use other means to determine the cost and schedule status of their contracts. Most contractors have recurring training programs on how to use internal reports.

Most contractor program managers (60%) review C/SCSC-related reports of any type on a biweekly or more frequent basis. Nearly 100% review such reports on a monthly or more frequent basis. However, a majority of contractor program managers (54%) indicated that they regularly used other means in lieu of using their C/SCSC-driven internal reports to determine the cost and schedule status of their contracts. Most contractor business managers (71%) indicated that their companies had in-house recurring training programs for their managers on how to use internal reports from their C/SCSC-accepted systems.

7.0 C/SCSC SURVEILLANCE

Most government program and business managers feel that government plant representatives do a good job at C/SCSC surveillance. This view appears stronger when the contractor is likely to have a previously accepted system.

Most government program (68%) and business managers (73%) agree that government plant representatives do a reasonably good job at C/SCSC surveillance. Agreement appears to be stronger when contractors are more likely to have previously accepted systems and surveillance has a more predominant role.

Most C/SCSC surveillance monitors have at least monthly contact with company representatives. For contractors with previously accepted systems, the frequency of contact appears greater.

Most C/SCSC surveillance monitors (89%) have at least monthly contact with company representatives. For contractors with systems previously accepted as C/SCSC-compliant or in the second phase of surveillance, it appears that approximately one-half of the surveillance monitors have at least weekly or more frequent contact, while about 20% to 25% of surveillance monitors have daily contact.

Most government business managers do not feel that C/SCSC surveillance is low in priority and that in-plant people are lacking in C/SCSC expertise, when contractors have previously accepted systems. However, for demonstrations, government business managers feel that C/SCSC surveillance is low in priority and in-plant surveillance people are lacking in C/SCSC expertise.

For contractors with previously accepted systems or in the second phase of surveillance, less than the majority of contractor business managers felt that in-plant government C/SCSC surveillance was low in priority (41%) and that in-plant government people were lacking in C/SCSC expertise (39%). For contractors that had just undergone the demonstration process, the contractor business managers felt differently. They felt that C/SCSC was low in priority (58%) and that the in-plant government people were lacking in C/SCSC expertise (64%). This would appear to reflect such factors as an apparently more subordinate role of surveillance during the earlier phase and a real lack of expertise which becomes remedied as the review process progresses.

APPENDIX 1

QUESTIONNAIRES AND INSTRUCTIONS

This appendix contains the four (4) questionnaires and the completion instructions. The introductory letter signed by Mr. Paul Thayer, Deputy Secretary of Defense, was included with the materials sent to both the government and contractor program managers.



THE DEPUTY SECRETARY OF DEFENSE

WASHINGTON, D.C. 20301

1 JUN 1983

Dear Program Manager:

Enclosed are questionnaires that relate to the DoD Cost/Schedule Control Systems Criteria (C/SCSC). They are being sent to all industry and DoD program managers with current DoD C/SCSC requirements.

The questionnaires are an essential step in a DoD-sponsored study effort that Arthur D. Little, Inc. is conducting under a contract for us. Our overall study effort has three objectives:

1. Determine the degree of acceptance and use of the C/SCSC.
2. Identify problems and issues, the resolution of which could lead to improvements in the C/SCSC and associated contract performance reporting requirements.
3. Recommend policy changes that would lead to these improvements, and that I could implement.

I'd like your help in accomplishing these objectives by ensuring that the questionnaires are completed and returned no later than June 24, 1983. The questionnaires have been designed to be brief and, above all, to ensure that your anonymity will be preserved. Your candor and cooperation are appreciated.

Thank you,


Paul Thayer

Enclosure



Opinion Research Corporation

600 Maryland Avenue, S.W., Washington, D.C. 20024

(202) 484-5992

June 9, 1983

Dear Government Program Manager:

Enclosed are two types of questionnaires relating to the experience of your Program Office with the COST/SCHEDULE CONTROL SYSTEMS CRITERIA (C/SCSC). The questionnaire marked Program Manager contains questions of a general nature concerning the opinions of you, the Program Manager, toward C/SCSC. It should take only a few minutes of your time to fill it out.

The second type of questionnaire, marked Contract Specific, contains more detailed questions concerning the experience of your office with C/SCSC on a specific contract with a specific contractor. We would appreciate it if you would have the person in your Program Office who is in charge of your C/SCSC-related activities complete one questionnaire for each contractor having a C/SCSC requirement.

Please return the completed questionnaires in the enclosed postage-paid envelope by June 24, 1983.

We appreciate your cooperation in this important survey and want to emphasize that your anonymity will be preserved. The number on the questionnaire will be used to tell us to remove your name from our mailing list when we receive your questionnaires.

If you have any questions about this survey, please feel free to call me at (609) 924-5900 weekdays, 8:30 A.M. - 5:00 P.M.

Sincerely,

Linda B. Donnelly

Linda B. Donnelly
Research Director

GOVERNMENT PROGRAM MANAGER

THE COST/SCHEDULE CONTROL SYSTEMS CRITERIA ANALYSIS STUDY

The first questions pertain to your C/SCSC program in general.

1. Please indicate the Department responsible for this program.

*Check
only
one*

1 ☐ Army
2 ☐ Navy
3 ☐ Air Force

2. Please indicate the phase of this program.

*Check
only
one*

1 ☐ Research and Development
2 ☐ Production
3 ☐ Other

3. Please indicate the category of weapon/equipment system which best describes this program.

*Check
only
one*

1 ☐ Aircraft
2 ☐ Electronics
3 ☐ Missile
4 ☐ Ordnance
5 ☐ Ship
6 ☐ Space
7 ☐ Surface Vehicle
8 ☐ Other (Please specify): _____

4. What will be the approximate total cost of the program through final production?

- 1 ☐ Less than \$25M
 2 ☐ At least \$25M but less than \$100M
 3 ☐ At least \$100M but less than \$500M
 4 ☐ At least \$500M but less than \$1B
 5 ☐ At least \$1B but less than \$5B
 6 ☐ \$5B or more

*Check
only
one*

5. If you had the choice of whether or not you would require your contractor(s) to have a C/SCSC-accepted system(s), would you:

- 1 ☐ Continue to require the currently accepted cost and schedule control system(s) as operating now
 2 ☐ Require the current system(s) with minor modifications
 3 ☐ Require the current system(s) with major modifications
 4 ☐ Not require the current system(s) at all?

*Check
only
one*

The following series of questions deal with Cost Performance Reports and your opinions concerning CPRs.

6. Do you regularly use other reports or other means in lieu of using Cost Performance Reports (CPRs) or data derived from CPRs in order to determine the cost and schedule status of your contract(s)?

- 1 ☐ Yes
 2 ☐ No

*Check
one*

7. Please rate the Cost Performance Reports (CPRs) or data directly derived from CPRs in terms of how well they help in doing each of the following:

Check one box for each item

	<u>Excellent</u>	<u>Good</u>	<u>Fair</u>	<u>Poor</u>	<u>No Opinion</u>
a. Providing an indicator of contract schedule status	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
b. Determining contract cost status	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
c. Identifying problem areas not previously recognized	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
d. Providing the capability of tracing problems to their sources	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
e. Identifying cost impacts of known problems	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
f. Estimating costs to complete	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>

8. How often do you personally review the cost and schedule status of your contract(s) based on Cost Performance Reports (CPRs) or data derived from CPRs?

1 ☐ More often than monthly

2 ☐ Monthly

3 ☐ Bimonthly

4 ☐ Quarterly

5 ☐ Less often than quarterly

6 ☐ Never

*Check
only
one*

9. How often do you use information or data derived from CPRs in either briefings or written reports to higher headquarters on the cost and schedule status of your program?

- Check
only
one*
- 1 ☐ More often than monthly
 - 2 ☐ Monthly
 - 3 ☐ Bimonthly
 - 4 ☐ Quarterly
 - 5 ☐ Less often than quarterly
 - 6 ☐ Never

Please indicate whether you agree, disagree, or have no opinion concerning the statements in items 10 through 17:

10. The concept of using criteria on what is an acceptable cost and schedule control system rather than specifying a single system for all contractors to use is not valid:

- Check
only
one*
- 1 ☐ Agree strongly
 - 2 ☐ Agree somewhat
 - 3 ☐ Disagree somewhat
 - 4 ☐ Disagree strongly
 - 5 ☐ Neither agree nor disagree

11. The C/SCSC approach of ensuring an adequate basis for keeping the Program Office informed on the cost and schedule status of a contract is as good or better than other approaches to achieving the same objectives:

- Check
only
one*
- 1 ☐ Agree strongly
 - 2 ☐ Agree somewhat
 - 3 ☐ Disagree somewhat
 - 4 ☐ Disagree strongly
 - 5 ☐ Neither agree nor disagree

12. The specific Cost and Schedule Control System criteria as currently delineated by DoD are not appropriate for evaluating whether a contractor's system provides an adequate basis for properly indicating cost and schedule status.

*Check
only
one*

- 1 ☐ Agree strongly
2 ☐ Agree somewhat
3 ☐ Disagree somewhat
4 ☐ Disagree strongly
5 ☐ Neither agree nor disagree

13. A major benefit of C/SCSC is that it forces a contractor to do planning that otherwise would not have been accomplished as thoroughly.

*Check
only
one*

- 1 ☐ Agree strongly
2 ☐ Agree somewhat
3 ☐ Disagree somewhat
4 ☐ Disagree strongly
5 ☐ Neither agree nor disagree

14. DoD C/SCSC practices are not effective in ensuring that an adequate basis exists in a contractor's system for reporting cost and schedule status to the program manager.

*Check
only
one*

- 1 ☐ Agree strongly
2 ☐ Agree somewhat
3 ☐ Disagree somewhat
4 ☐ Disagree strongly
5 ☐ Neither agree nor disagree

15. Cost Performance Reports are received on a sufficiently timely basis so as to be useful to DoD Program Office in determining cost and/or schedule status:

*Check
only
one*

1 ☐ Agree strongly
2 ☐ Agree somewhat
3 ☐ Disagree somewhat
4 ☐ Disagree strongly
5 ☐ Neither agree nor disagree

16. The costs to the Program Office in terms of time and manpower expended for all C/SCSC-related activities are outweighed by the benefits derived by the Program Office in managing the contract.

*Check
only
one*

1 ☐ Agree strongly
2 ☐ Agree somewhat
3 ☐ Disagree somewhat
4 ☐ Disagree strongly
5 ☐ Neither agree nor disagree

17. Non-Program Office plant representatives such as DCAs, DCAA, NAVPROs, etc. do a reasonably good job of monitoring the contractor's C/SCSC-accepted system to ensure that it is functioning effectively.

*Check
only
one*

1 ☐ Agree strongly
2 ☐ Agree somewhat
3 ☐ Disagree somewhat
4 ☐ Disagree strongly
5 ☐ Neither agree nor disagree

18. On the scale below, please circle one number for each item to indicate how knowledgeable you personally are about the contents of each of the following Cost Performance Report (CPR) Formats:

1 = Not knowledgeable

10 = Very knowledgeable

a. Format 1 - CWBS levels	1	2	3	4	5	6	7	8	9	10
b. Format 2 - Organization levels	1	2	3	4	5	6	7	8	9	10
c. Format 3 - Baseline information	1	2	3	4	5	6	7	8	9	10
d. Format 4 - Manpower information	1	2	3	4	5	6	7	8	9	10
e. Format 5 - Problem analysis	1	2	3	4	5	6	7	8	9	10

Now, just a few questions about yourself so that your responses can be compared with those of other individuals with experience similar to yours.

19. How long have you been in your current job?

- Check only one*
- 1 ☐ Less than one year
- 2 ☐ 1 to 3 years
- 3 ☐ More than 3 years

20. Did you have a previous job which provided you with some familiarity with C/SCSC?

- Check one*
- 1 ☐ Yes
- 2 ☐ No

21. What C/SCSC training, if any, have you had?

- Check all that apply*
- 1 ☐ C/SCSC-related courses at Defense Systems Management College (DSMC), Air Force Institute of Technology, or Army Management Engineering Training Agency
- 2 ☐ Other formal training (e.g., Industry Seminar, portion of DSCM course, etc.)
- 3 ☐ In-house or On-the-job training
- 4 ☐ None

22. Finally, please give us your thoughts on what steps DoD might take to improve the usefulness of C/SCSC to you and/or to your contractor(s). If you wish to comment about any other aspect of C/SCSC, we welcome such observations. These comments, as well as all other information provided in this questionnaire, will remain completely confidential. Your responses will never be associated with any information by which you can be personally identified. If you choose to respond -- and we hope you will -- please use the space below and feel free to add extra pages as necessary. We would appreciate hearing from you.

June 9, 1983

Dear Government Business Managers:

Please complete one of these questionnaires for each of your contractors having a COST/SCHEDULE CONTROL SYSTEMS CRITERIA (C/SCSC) requirement. If a contractor has more than one active contract with a C/SCSC requirement, then please select the active contract that most recently has been through a Demonstration Review and resulted in DOD acceptance. If you have no active contract meeting this criterion, then select the most recent active contract to have completed the C/SCSC Subsequent Application Review (SAR) process.

If you have no active contracts meeting the above criteria, then select the most recently completed contract that went through the Demonstration Review process and resulted in DOD acceptance. If you do not have such a completed contract, then select the most recently completed contract that has completed the SAR process.

If there are no contracts with a specific contractor that meet these criteria, then for that specific contractor answer only question 33 and include the comment: "No contract for this contractor and program has completed the C/SCSC review process."

Please answer all questions in this questionnaire in terms of the specific contract(s) you have selected for this questionnaire. We do not need to know the contract name.

The questionnaire should be returned with the completed Government Program Manager's questionnaire by June 24, 1983.

We appreciate your cooperation in this important survey and want to emphasize that your anonymity will be preserved. The number on the questionnaire will be used to tell us to remove your name from our mailing list when we receive your questionnaires.

GOVERNMENT BUSINESS MANAGERS

51711 060983

OMB NO. 0704-0183
Expires 12/31/83

CONTRACT SPECIFIC

THE COST/SCHEDULE CONTROL SYSTEMS CRITERIA ANALYSIS STUDY

The first questions pertain to this contract in general.

1. The contract selected uses a C/SCSC-compliant system which was accepted by means of . . .

*Check
one*

- 1 ☐ Demonstration Review
2 ☐ Subsequent Application Review (SAR)

2. Please indicate the Department which awarded this contract.

*Check
only
one*

- 1 ☐ Army
2 ☐ Navy
3 ☐ Air Force

3. Please indicate the predominant type of work being done under this contract.

*Check
only
one*

- 1 ☐ Advanced development
2 ☐ Engineering development
3 ☐ Low rate production
4 ☐ Production
5 ☐ Other

4. Please indicate the category of weapon/equipment system which best describes this contract:

- Check
only
one*
- 1 ☐ Aircraft
 - 2 ☐ Electronics
 - 3 ☐ Missile
 - 4 ☐ Ordnance
 - 5 ☐ Ship
 - 6 ☐ Space
 - 7 ☐ Surface vehicle
 - 8 ☐ Other (Please specify): _____

5. What is the approximate total dollar value of this contract?

- Check
only
one*
- 1 ☐ Under \$10M
 - 2 ☐ At least \$10M but less than \$25M
 - 3 ☐ At least \$25M but less than \$40M
 - 4 ☐ At least \$40M but less than \$100M
 - 5 ☐ At least \$100M but less than \$160M
 - 6 ☐ At least \$160M but less than \$500M
 - 7 ☐ \$500M or more

6. What type of contract is the one you have selected?

- Check
only
one*
- 1 ☐ CPFF
 - 2 ☐ CPAF
 - 3 ☐ CPIF
 - 4 ☐ FPI
 - 5 ☐ Other (Please specify): _____

7. What is the duration of the contract?

- Check
only
one*
- 1 ☐ Less than 12 months
 - 2 ☐ At least 12 months but less than 24 months
 - 3 ☐ At least 24 months but less than 36 months
 - 4 ☐ At least 36 months but less than 48 months
 - 5 ☐ At least 48 months but less than 60 months
 - 6 ☐ 60 months or more

8. Was the contract definitized at the time of contract award?

- Check
one*
- 1 ☐ Yes → SKIP TO Q.10
 - 2 ☐ No

IF "NO"

9. Approximately how many months elapsed from contract award to contract definitization?

- Check
only
one*
- 1 ☐ Less than 3 months
 - 2 ☐ At least 3 months but less than 6
 - 3 ☐ At least 6 months but less than 9
 - 4 ☐ At least 9 months but less than 12
 - 5 ☐ At least 12 months but less than 15
 - 6 ☐ At least 15 months but less than 18
 - 7 ☐ 18 months or more

- 4
10. Approximately how many months after the contract award did the contractor establish the C/SCSC performance measurement baseline?

*Check
only
one*

- 1 ☐ Less than 3 months
- 2 ☐ At least 3 months but less than 6
- 3 ☐ At least 6 months but less than 9
- 4 ☐ At least 9 months but less than 12
- 5 ☐ At least 12 months but less than 15
- 6 ☐ At least 15 months but less than 18
- 7 ☐ At least 18 months but less than 21
- 8 ☐ At least 21 months but less than 24
- 9 ☐ 24 months or more

11. Approximately how many months after contract award would have been the earliest you could reasonably have expected the C/SCSC performance measurement baseline to have been established by the contractor?

*Check
only
one*

- 1 ☐ Less than 3 months
- 2 ☐ At least 3 months but less than 6
- 3 ☐ At least 6 months but less than 9
- 4 ☐ At least 9 months but less than 12
- 5 ☐ At least 12 months but less than 15
- 6 ☐ At least 15 months but less than 18
- 7 ☐ At least 18 months but less than 21
- 8 ☐ At least 21 months but less than 24
- 9 ☐ 24 months or more

The next series of questions deal with the DoD C/SCSC review process that normally entails several in-plant visits by DoD C/SCSC review teams.

The Question 12 series should be answered in reference only to the one visit that you consider to have been the key DoD C/SCSC review for this contract.

Based on your recollection of the key review . . .

12a. Approximately how many months after contract award was the Demonstration Review or the Subsequent Application Review held?

*Check
only
one*

- 1 ☐ Less than 3 months
- 2 ☐ At least 3 months but less than 6
- 3 ☐ At least 6 months but less than 12
- 4 ☐ At least 12 months but less than 18
- 5 ☐ At least 18 months but less than 24
- 6 ☐ At least 24 months but less than 30
- 7 ☐ At least 30 months but less than 36
- 8 ☐ 36 months or more

12b. Did Program Office representative(s) participate in the review?

*Check
one*

- 1 ☐ Yes
- 2 ☐ No → SKIP TO Q.13

IF "YES"

12c. What organizations were represented?

*Check
all
that
apply*

- 1 ☐ Program Office
- 2 ☐ Service C/SCSC Focal Point, i.e., HQ DARCOM, HQ NAVMAT, HQ AFSC
- 3 ☐ Government plant representatives, e.g., DCAS, AFPRO, NAVPRO, etc.
- 4 ☐ Commodity Command, e.g., MICOM, ASD, NAVAIR, etc.
- 5 ☐ DCAA
- 6 ☐ Other (Please specify): _____

12d. What was the duration of the review in workdays?

- Check
only
one*
- 1 ☐ Under 3 workdays
 - 2 ☐ 3-5 workdays
 - 3 ☐ 6-10 workdays
 - 4 ☐ 11-15 workdays
 - 5 ☐ More than 15 workdays

12e. What was the size of the Review Team?

- Check
only
one*
- 1 ☐ Less than 4 persons
 - 2 ☐ 4-7 persons
 - 3 ☐ 8-11 persons
 - 4 ☐ 12-15 persons
 - 5 ☐ 16-19 persons
 - 6 ☐ 20-23 persons
 - 7 ☐ 24 or more persons

12f. Approximately how many discrepancies or corrective action items were identified by the DoD Review Team?

- Check
only
one*
- 1 ☐ 10 or less
 - 2 ☐ 11-20
 - 3 ☐ 21-30
 - 4 ☐ 31-40
 - 5 ☐ 41-50
 - 6 ☐ More than 50
 - 7 ☐ Don't know, too difficult to approximate

13. In what year did this contractor receive official notification that the C/SCSC requirement had been satisfactorily met for this contract?

- 1 ☐ 1983
 2 ☐ 1982
 3 ☐ 1981
 4 ☐ 1980
 5 ☐ 1979
 6 ☐ 1978
 7 ☐ 1977
 8 ☐ 1976
 9 ☐ 1975 or earlier

*Check
only
one*

Now, we would like your opinion on various aspects of the review process.

14. In your view, how necessary is the participation of the following to the C/SCSC review process . . . ?

Check one box for each item

	<u>Very Necessary</u>	<u>Somewhat Necessary</u>	<u>Not Necessary</u>
a. Commodity Command participation, e.g., ASD, NAVAIR, MICOM, etc.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
b. Service C/SCSC Focal Point participation, i.e., HQ DARCOM, HQ NAVMAT, HQ AFSC	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
c. Contract Administration Office participation, e.g., DCAS, AFPRO, etc.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
d. Defense Contract Audit Agency (DCAA) participation	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
e. Program Office participation	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>

15. All things considered, how necessary is the entire C/SCSC review process itself to the proper functioning of the contractor's cost and schedule control system?

*Check
only
one*

- 1 ☐ Very necessary
2 ☐ Somewhat necessary
3 ☐ Not necessary

The following series of questions deal with Cost Performance Reports and your opinions concerning CPRs.

16. Considering the contract itself as CWBS Level 1, what is the lowest CWBS level regularly reported to you by the contractor on Format 1 of the Cost Performance Report?

*Check
only
one*

- 1 ☐ Level 2
2 ☐ Level 3
3 ☐ Level 4
4 ☐ Level 5
5 ☐ Level 6
6 ☐ Level 7
7 ☐ Level 8
8 ☐ Level 9 or lower

17. For meaningful contract analysis, this CWBS level, in your opinion, is:

*Check
only
one*

- 1 ☐ Too low
2 ☐ Too high
3 ☐ Just about right
4 ☐ No opinion

18. Which of the statements below best characterizes the extent to which the Program Office routinely reviews and analyzes the Cost Performance Reports received each month?

*Check
only
one*

- 1 ☐ We review and/or analyze the report in its entirety
2 ☐ We review and/or analyze only certain Formats
3 ☐ We review and/or analyze only those portions of the report where a variance threshold has been exceeded
4 ☐ We do not review and/or analyze the reports

19. In your opinion, could the number of pages in the Cost Performance Reports you receive be reduced without hampering your ability to manage the contract?

*Check
one*

1 ☐ Yes

2 ☐ No → SKIP TO Q.22

IF "YES"

20. Are all or some of the pages that could be eliminated submitted solely at the contractor's choice (e.g., internal computer printouts in lieu of summary data, etc.)?

1 ☐ All → SKIP TO Q.22

*Check
only
one*

2 ☐ Some

3 ☐ None

IF "SOME" OR "NONE"

21. For the pages that are not submitted solely at the contractor's choice, please give your rough estimate of the percentage of pages that could be reduced.

1 ☐ 1 - 5 percent

2 ☐ 6 - 10 percent

3 ☐ 11 - 20 percent

*Check
only
one*

4 ☐ 21 - 30 percent

5 ☐ 31 - 40 percent

6 ☐ 41 - 50 percent

7 ☐ 51 - 75 percent

8 ☐ Over 75 percent

22. Approximately how many calendar weeks after the close of the contractor's reporting period are Cost Performance Reports received by the Program Office?

1 ☐ Less than one week

2 ☐ At least 1 week but less than 2

3 ☐ At least 2 weeks but less than 3

*Check
only
one*

4 ☐ At least 3 weeks but less than 4

5 ☐ At least 4 weeks but less than 5

6 ☐ 5 weeks or more

23. On average, how many calendar weeks elapse from the time Cost Performance Reports are received by the Program Office until reviews and analyses are completed within the Program Office?

- 1 ☐ Less than 1 week
2 ☐ At least 1 week but less than 2
3 ☐ At least 2 weeks but less than 3
4 ☐ At least 3 weeks but less than 4
5 ☐ At least 4 weeks but less than 5
6 ☐ 5 weeks or more

*Check
only
one*

24. Approximately how many Program Office man-days (include all Program Office personnel and contracted support, if any) on average are spent per month collecting, reviewing, analyzing, and summarizing information contained in contractor Cost Performance Reports?

- 1 ☐ Less than 1
2 ☐ 1-4
3 ☐ 5-9
4 ☐ 10-14
5 ☐ 15-19
6 ☐ 20-24
7 ☐ 25-29
8 ☐ 30 or more

*Check
only
one*

25. Please rate the Cost Performance Reports (CPRs) in terms of how well they help in doing each of the following:

Check one box for each item

	<u>Excellent</u>	<u>Good</u>	<u>Fair</u>	<u>Poor</u>	<u>No Opinion</u>
a. Providing an indicator of contract schedule status	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
b. Determining contract cost status	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
c. Identifying problem areas not previously recognized	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
d. Providing the capability of tracing problems to their sources	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
e. Identifying cost impacts of known problems	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
f. Estimating costs to complete	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>

Please indicate whether you agree, disagree, or have no opinion concerning the statements in items 26 through 32:

26. The contractor's cost and schedule control systems and procedures used for this contract are effective in helping management to control contract performance.

Check only one

1 ☐ Agree strongly

2 ☐ Agree somewhat

3 ☐ Disagree somewhat

4 ☐ Disagree strongly

5 ☐ Neither agree nor disagree

27. The specific cost and schedule control systems criteria as currently delineated by DoD are not appropriate for evaluating whether a contractor's system provides an adequate basis for properly indicating cost and schedule status on this type of contract.

*Check
only
one*

1 ☐ Agree strongly
2 ☐ Agree somewhat
3 ☐ Disagree somewhat
4 ☐ Disagree strongly
5 ☐ Neither agree nor disagree

28. The contractor's cost schedule and control system provides internal data for this contract which indicate work progress, properly relate cost, schedule and technical accomplishment, are valid, timely and auditable, and supply the Program Office with information at a practicable level of summarization.

*Check
only
one*

1 ☐ Agree strongly
2 ☐ Agree somewhat
3 ☐ Disagree somewhat
4 ☐ Disagree strongly
5 ☐ Neither agree nor disagree

29. DoD C/SCSC practices on this contract were not effective in ensuring that an adequate basis existed in the contractor's system for reporting cost and schedule status to the program manager.

*Check
only
one*

1 ☐ Agree strongly
2 ☐ Agree somewhat
3 ☐ Disagree somewhat
4 ☐ Disagree strongly
5 ☐ Neither agree nor disagree

30. The Cost Performance Report is received on a sufficiently timely basis so as to be useful to the Program Office in determining cost and/or schedule status:

*Check
only
one*

- 1 ☐ Agree strongly
2 ☐ Agree somewhat
3 ☐ Disagree somewhat
4 ☐ Disagree strongly
5 ☐ Neither agree nor disagree

31. The costs to the Program Office in terms of time and manpower expended for all C/SCSC-related activities are outweighed by the benefits derived by the Program Office in managing this contract.

*Check
only
one*

- 1 ☐ Agree strongly
2 ☐ Agree somewhat
3 ☐ Disagree somewhat
4 ☐ Disagree strongly
5 ☐ Neither agree nor disagree

32. Non-Program Office plant representatives such as DCAS, DCAA, NAVPROs, etc. do a reasonably good job of monitoring the contractor's C/SCSC-accepted system to ensure that it is functioning effectively.

*Check
only
one*

- 1 ☐ Agree strongly
2 ☐ Agree somewhat
3 ☐ Disagree somewhat
4 ☐ Disagree strongly
5 ☐ Neither agree nor disagree

33. Finally, please give us your thoughts on what steps DoD might take to improve the usefulness of C/SCSC to you and/or to this contractor. If you wish to comment about any other aspect of C/SCSC, we welcome such observations. These comments, as well as all other information provided in this questionnaire, will remain completely confidential. Your responses will never be associated with any information by which you can be personally identified. If you choose to respond -- and we hope you will -- please use the space below and feel free to add extra pages as necessary. We would appreciate hearing from you.



Opinion Research Corporation

600 Maryland Avenue S.W. Washington, D.C. 20024

(202) 484-5992

June 9, 1983

Dear Contractor Program Manager:

Enclosed are two types of questionnaires relating to the experience of your Program Office with the COST/SCHEDULE CONTROL SYSTEMS CRITERIA (C/SCSC). The questionnaire marked Program Manager contains questions of a general nature concerning the opinions of you, the Program Manager, toward C/SCSC. It should take only a few minutes of your time to fill it out.

The second questionnaire, marked Contract Specific, contains more detailed questions concerning the experience of your office with C/SCSC on a specific contract. We would appreciate it if you would have the person in your Program Office who is in charge of your C/SCSC-related activities complete the second questionnaire.

Please return both completed questionnaires in the enclosed postage-paid envelope by June 24, 1983.

We appreciate your cooperation in this important survey and want to emphasize that your anonymity will be preserved. The number on the questionnaire will be used to tell us to remove your name from our mailing list when we receive your questionnaires.

If you have any questions about this survey, please feel free to call me at (609) 924-5900 weekdays, 8:30 A.M. - 5:00 P.M.

Sincerely,

Linda B. Donnelly

Linda B. Donnelly
Research Director

CONTRACTOR PROGRAM MANAGER

THE COST/SCHEDULE CONTROL SYSTEMS CRITERIA ANALYSIS STUDY

The first questions pertain to your C/SCSC program in general.

1. Please indicate the military department responsible for this program.

*Check
only
one*

- 1 ☐ Army
2 ☐ Navy
3 ☐ Air Force

2. Please indicate the phase of this program.

*Check
only
one*

- 1 ☐ Research and Development
2 ☐ Production
3 ☐ Other

3. Please indicate the category of weapon/equipment system which best describes this program.

*Check
only
one*

- 1 ☐ Aircraft
2 ☐ Electronics
3 ☐ Missile
4 ☐ Ordnance
5 ☐ Ship
6 ☐ Space
7 ☐ Surface Vehicle
8 ☐ Other (Please specify): _____

4. What will be the approximate total cost of the program through final production?

*Check
only
one*

- 1 ☐ Less than \$25M
- 2 ☐ At least \$25M but less than \$100M
- 3 ☐ At least \$100M but less than \$500M
- 4 ☐ At least \$500M but less than \$1B
- 5 ☐ At least \$1B but less than \$5B
- 6 ☐ \$5B or more

5. If you had the choice of whether or not you would use your C/SCSC-accepted system to assist you in managing your program, would you:

*Check
only
one*

- 1 ☐ Continue to use the C/SCSC-accepted system as it is currently operating now
- 2 ☐ Use your C/SCSC-accepted system with minor modifications
- 3 ☐ Use your C/SCSC-accepted system with major modifications
- 4 ☐ Not use the C/SCSC-accepted system at all?

The following series of questions deal with reporting.

6. Do you regularly use other reports or other means in lieu of using C/SCSC-driven internal cost and schedule reports in order to determine cost and schedule status of your contract(s)?

*Check
one*

- 1 ☐ Yes
- 2 ☐ No

7. Please rate your C/SCSC-driven internal cost and schedule reports in terms of how well they help in doing each of the following:

Check one box for each item

	<u>Excellent</u>	<u>Good</u>	<u>Fair</u>	<u>Poor</u>	<u>No Opinion</u>
a. Providing an indicator of contract schedule status	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
b. Determining contract cost status	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
c. Identifying problem areas not previously recognized	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
d. Providing the capability of tracing problems to their sources	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
e. Identifying cost impacts of known problems	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
f. Estimating costs to complete	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>

8. How often do you personally review reports of any type either generated directly by your C/SCSC-accepted system or derived from your system?

Check only one

1 ☐ Daily

2 ☐ Weekly

3 ☐ Biweekly

4 ☐ Monthly

5 ☐ Quarterly

6 ☐ Less often than quarterly

7 ☐ Never

The following questions concern your use of the C/SCSC-accepted system or internally tailored systems.

9. Please indicate the response that best describes how often your company uses its C/SCSC-accepted system on DoD contracts, when C/SCSC is not a contractual requirement.

*Check
only
one*

1 ☐ All of the time
2 ☐ Some of the time
3 ☐ Never
4 ☐ Don't know

10. Please indicate the response that best describes how often your company uses an internally tailored earned-value system on DoD contracts, when earned-value is not a contractual requirement.

*Check
only
one*

1 ☐ All of the time
2 ☐ Some of the time
3 ☐ Never
4 ☐ Don't know

11. Does your company have commercial work?

*Check
one*

1 ☐ Yes
2 ☐ No → SKIP TO Q.14

IF "YES"

12. Please indicate the response that best describes how often your company uses its C/SCSC-accepted system on commercial work.

*Check
only
one*

1 ☐ All of the time
2 ☐ Some of the time
3 ☐ Never
4 ☐ Don't know

13. Please indicate the response that best describes how often your company uses an internally tailored earned-value system on commercial work.

*Check
only
one*

1 ☐ All of the time
2 ☐ Some of the time
3 ☐ Never
4 ☐ Don't know

Please indicate whether you agree, disagree, or have no opinion concerning the statements in items 14 through 20:

14. The concept of using criteria on what is an acceptable cost and schedule control system rather than specifying a single system for all contractors to use is not valid:

*Check
only
one*

- 1 ☐ Agree strongly
2 ☐ Agree somewhat
3 ☐ Disagree somewhat
4 ☐ Disagree strongly
5 ☐ Neither agree nor disagree

15. The C/SCSC approach of ensuring an adequate basis for keeping your Program Office informed on the cost and schedule status of a contract is as good or better than other approaches to achieving the same objectives:

*Check
only
one*

- 1 ☐ Agree strongly
2 ☐ Agree somewhat
3 ☐ Disagree somewhat
4 ☐ Disagree strongly
5 ☐ Neither agree nor disagree

16. The specific Cost and Schedule Control System criteria as currently delineated by DoD are not appropriate for evaluating whether your company's system provides an adequate basis for properly indicating cost and schedule status.

*Check
only
one*

- 1 ☐ Agree strongly
2 ☐ Agree somewhat
3 ☐ Disagree somewhat
4 ☐ Disagree strongly
5 ☐ Neither agree nor disagree

17. A major benefit of C/SCSC is that it forces a contractor to do planning that otherwise would not have been accomplished as thoroughly.

*Check
only
one*

1 ☐ Agree strongly
2 ☐ Agree somewhat
3 ☐ Disagree somewhat
4 ☐ Disagree strongly
5 ☐ Neither agree nor disagree

18. DoD C/SCSC practices are not effective in ensuring that an adequate basis exists in your company's system for reporting cost and schedule status to the program manager.

*Check
only
one*

1 ☐ Agree strongly
2 ☐ Agree somewhat
3 ☐ Disagree somewhat
4 ☐ Disagree strongly
5 ☐ Neither agree nor disagree

19. C/SCSC-driven internal cost and schedule reports are received on a sufficiently timely basis so as to be useful to your Program Office in determining cost and/or schedule status.

*Check
only
one*

1 ☐ Agree strongly
2 ☐ Agree somewhat
3 ☐ Disagree somewhat
4 ☐ Disagree strongly
5 ☐ Neither agree nor disagree

20. The costs to your company (and to DoD) in terms of time and manpower expended to operate the C/SCSC-accepted system are outweighed by the benefits derived by your Program Office in managing the contract.

*Check
only
one*

1 ☐ Agree strongly
2 ☐ Agree somewhat
3 ☐ Disagree somewhat
4 ☐ Disagree strongly
5 ☐ Neither agree nor disagree

21. On the scale below, please circle one number for each item to indicate how knowledgeable you personally are about the contents of each of the following Cost Performance Report (CPR) Formats:

1 = Not knowledgeable

10 = Very knowledgeable

a. Format 1 - CWBS levels	1	2	3	4	5	6	7	8	9	10
b. Format 2 - Organization levels	1	2	3	4	5	6	7	8	9	10
c. Format 3 - Baseline information	1	2	3	4	5	6	7	8	9	10
d. Format 4 - Manpower information	1	2	3	4	5	6	7	8	9	10
e. Format 5 - Problem analysis	1	2	3	4	5	6	7	8	9	10

22. In your judgment, how effective has your C/SCSC-accepted system been in assisting you and your staff to keeping your program on schedule and within cost limits?

1 ☐ Very effective

Check only one 2 ☐ Somewhat effective

3 ☐ Not too effective

4 ☐ Not at all effective

23. In your view, how accurately (for the "as of" date of the report) do the Cost Performance Reports portray the cost and schedule status of the contract(s) for your program?

1 ☐ Very accurately

Check only one 2 ☐ Somewhat accurately

3 ☐ Not too accurately

4 ☐ Not at all accurately

Now, just a few questions about yourself so that your responses can be compared with those of other individuals with experience similar to yours.

24. How long have you been in your current job?

- Check
only
one*
- 1 ☐ Less than one year
2 ☐ 1 to 3 years
3 ☐ More than 3 years

25. Did you have a previous job which provided you with some familiarity with C/SCSC?

- Check
one*
- 1 ☐ Yes
2 ☐ No

26. What C/SCSC training, if any, have you had?

- Check
all
that
apply*
- 1 ☐ C/SCSC-related courses at Defense Systems Management College (DSMC), Air Force Institute of Technology, or Army Management Engineering Training Agency
2 ☐ Other formal training (e.g., Industry Seminar, portion of DSCM course, etc.)
3 ☐ In-house or On-the-job training
4 ☐ None

27. Finally, please give us your thoughts on what steps DoD might take to improve the usefulness of C/SCSC to you and/or to your contractor(s). If you wish to comment about any other aspect of C/SCSC, we welcome such observations. These comments, as well as all other information provided in this questionnaire, will remain completely confidential. Your responses will never be associated with any information by which you can be personally identified. If you choose to respond -- and we hope you will -- please use the space below and feel free to add extra pages as necessary. We would appreciate hearing from you.

CONTRACT SPECIFIC

June 9, 1983

Dear Contractor Business Manager:

The enclosed questionnaire asks for detailed information about one specific contract on which compliance with the COST/SCHEDULE CONTROL SYSTEMS CRITERIA (C/SCSC) is required. If you have more than one active contract in your program, please select the most recent one that has been through a Demonstration Review and has resulted in DOD acceptance. If you have no contract meeting this criterion, then select the most recent active contract to have completed the C/SCSC Subsequent Application Review (SAR) process.

If you have no active contracts meeting the above criteria, then select the most recently completed contract that went through the Demonstration Review process and resulted in DOD acceptance. If you do not have such a completed contract, then select the most recently completed contract that has completed the SAR process.

Please answer all questions in this questionnaire in terms of the one specific contract you have selected. We do not need to know the contract name.

If you have no contracts that meet these criteria, then answer only question 37 and include the comment: "No contract in this program has completed the C/SCSC review process."

This questionnaire should be returned with the completed Contractor Program Manager's questionnaire by June 24, 1983.

We appreciate your cooperation in this important survey and want to emphasize that your anonymity will be preserved. The number on the questionnaire will be used to tell us to remove your name from our mailing list when we receive your questionnaires.

51711

060983

CONTRACTOR BUSINESS MANAGERS

OMB No. 0704-0183
Expires 12/31/83

CONTRACT SPECIFIC

THE COST/SCHEDULE CONTROL SYSTEMS CRITERIA ANALYSIS STUDY

The first questions pertain to the selected contract in general.

1. The contract selected by you uses an operating C/SCSC-compliant system which was accepted by DoD by means of . . .

*Check
one*

- 1 ☐ Demonstration Review
2 ☐ Subsequent Application Review (SAR)

2. Please indicate the Military Department which awarded this contract.

*Check
only
one*

- 1 ☐ Army
2 ☐ Navy
3 ☐ Air Force

3. Please indicate the predominant type of work being done under this contract.

*Check
only
one*

- 1 ☐ Advanced development
2 ☐ Engineering development
3 ☐ Low rate production
4 ☐ Production
5 ☐ Other

4. Please indicate the category of weapon/equipment system which best describes this contract:

- Check
only
one*
- 1 ☐ Aircraft
 - 2 ☐ Electronics
 - 3 ☐ Missile
 - 4 ☐ Ordnance
 - 5 ☐ Ship
 - 6 ☐ Space
 - 7 ☐ Surface vehicle
 - 8 ☐ Other (Please specify): _____

5. What is the approximate total dollar value of this contract?

- Check
only
one*
- 1 ☐ Under \$10M
 - 2 ☐ At least \$10M but less than \$25M
 - 3 ☐ At least \$25M but less than \$40M
 - 4 ☐ At least \$40M but less than \$100M
 - 5 ☐ At least \$100M but less than \$160M
 - 6 ☐ At least \$160M but less than \$500M
 - 7 ☐ \$500M or more

6. What type of contract is the one you have selected?

- Check
only
one*
- 1 ☐ CPFF
 - 2 ☐ CPAF
 - 3 ☐ CPIF
 - 4 ☐ FPI
 - 5 ☐ Other (Please specify): _____

7. What is the duration of the contract?

- Check
only
one*
- 1 ☐ Less than 12 months
 - 2 ☐ At least 12 months but less than 24 months
 - 3 ☐ At least 24 months but less than 36 months
 - 4 ☐ At least 36 months but less than 48 months
 - 5 ☐ At least 48 months but less than 60 months
 - 6 ☐ 60 months or more

8. Was the contract definitized at the time of contract award?

- Check
one*
- 1 ☐ Yes → SKIP TO Q.10
 - 2 ☐ No

IF "NO"

9. Approximately how many months elapsed from contract award to contract definitization?

- Check
only
one*
- 1 ☐ Less than 3 months
 - 2 ☐ At least 3 months but less than 6
 - 3 ☐ At least 6 months but less than 9
 - 4 ☐ At least 9 months but less than 12
 - 5 ☐ At least 12 months but less than 15
 - 6 ☐ At least 15 months but less than 18
 - 7 ☐ 18 months or more

10. Approximately how many months after the contract award was the C/SCSC performance measurement baseline established?

- 1 ☐ Less than 3 months
 2 ☐ At least 3 months but less than 6
 3 ☐ At least 6 months but less than 9
 4 ☐ At least 9 months but less than 12
 5 ☐ At least 12 months but less than 15
 6 ☐ At least 15 months but less than 18
 7 ☐ At least 18 months but less than 21
 8 ☐ At least 21 months but less than 24
 9 ☐ 24 months or more

*Check
only
one*

The next series of questions deal with the DoD C/SCSC review process that normally entails several in-plant visits by DoD C/SCSC review teams.

The Question 11 series should be answered in reference only to the one visit that you consider to have been the key DoD C/SCSC review for this contract.

Based on your recollection of the key review . . .

- 11a. Approximately how many months after contract award was the Demonstration Review or the Subsequent Application Review held?

- 1 ☐ Less than 3 months
 2 ☐ At least 3 months but less than 6
 3 ☐ At least 6 months but less than 12
 4 ☐ At least 12 months but less than 18
 5 ☐ At least 18 months but less than 24
 6 ☐ At least 24 months but less than 30
 7 ☐ At least 30 months but less than 36
 8 ☐ 36 months or more

*Check
only
one*

11b. What organizations were represented?

- Check
all
that
apply*
- 1 ☐ Program Office
 - 2 ☐ Service C/SCSC Focal Point, i.e., HQ DARCOM,
HQ NAVMAT, HQ AFSC
 - 3 ☐ Government plant representatives, e.g., DCAS,
AFPRO, NAVPRO, etc.
 - 4 ☐ Commodity Command, e.g., MICOM, ASD, NAVAIR, etc.
 - 5 ☐ DCAA
 - 6 ☐ Other (Please specify): _____

11c. What was the duration of the review in workdays?

- Check
only
one*
- 1 ☐ Under 3 workdays
 - 2 ☐ 3-5 workdays
 - 3 ☐ 6-10 workdays
 - 4 ☐ 11-15 workdays
 - 5 ☐ More than 15 workdays

11d. What was the size of the Review Team?

- Check
only
one*
- 1 ☐ Less than 4 persons
 - 2 ☐ 4-7 persons
 - 3 ☐ 8-11 persons
 - 4 ☐ 12-15 persons
 - 5 ☐ 16-19 persons
 - 6 ☐ 20-23 persons
 - 7 ☐ 24 or more persons

- 11e. Approximately how many discrepancies or corrective action items were identified by the DoD Review Team?

- 1 ☐ 10 or less
 2 ☐ 11-20
 3 ☐ 21-30
 4 ☐ 31-40
 5 ☐ 41-50
 6 ☐ More than 50
 7 ☐ Don't know, too difficult to approximate

*Check
only
one*

- 11f. How would you rate the review team's performance on each of the following characteristics using the scale provided?

Check one box for each item

	Excellent	Good	Fair	Poor	No Opinion
a. Team leadership and control	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
b. Technical qualifications of the team	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
c. Team working relationships with your company	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
d. Thoroughness of team's review	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
e. Team's use of common sense and flexibility	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
f. Overall team professionalism and effectiveness	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>

- 11g. To the best of your knowledge, were this review team's C/SCSC interpretations reasonably consistent with other DoD review teams' interpretations?

- 1 ☐ Yes
 2 ☐ No
 3 ☐ No opinion

*Check
only
one*

12. Based on your recollection of the entire review process, please estimate how many man-days were spent by your company in support of the entire review process over and above the normal expenditures for the day-to-day operation of your cost and schedule control system. (Do not include work devoted to system implementation, establishing the performance measurement baseline or for operating the internal cost/schedule control system.)

*Check
only
one*

- 1 ☐ 0 - 10 man-days
- 2 ☐ 11 - 25 man-days
- 3 ☐ 26 - 50 man-days
- 4 ☐ 51 - 100 man-days
- 5 ☐ 101 - 150 man-days
- 6 ☐ 151 - 200 man-days
- 7 ☐ 201 - 250 man-days
- 8 ☐ 251 - 300 man-days
- 9 ☐ Over 300 man-days

13. In your opinion, did the benefits to your company from the review process outweigh its costs to your company?

*Check
only
one*

- 1 ☐ Yes
- 2 ☐ No
- 3 ☐ No opinion

14. Approximately how many months after contract award did you receive official notification from your contracting office that your system had been satisfactorily applied to the contract?

- 1 ☐ Less than 6 months
2 ☐ At least 6 months but under 12 months
3 ☐ At least 12 months but under 18 months
4 ☐ At least 18 months but under 24 months
5 ☐ At least 24 months but under 30 months
6 ☐ At least 30 months but under 36 months
7 ☐ At least 36 months but under 42 months
8 ☐ At least 42 months but under 48 months
9 ☐ 48 months or more

*Check
only
one*

15. In what year was this notification received?

- 1 ☐ 1983
2 ☐ 1982
3 ☐ 1981
4 ☐ 1980
5 ☐ 1979
6 ☐ 1978
7 ☐ 1977
8 ☐ 1976
9 ☐ 1975 or before

*Check
only
one*

The following series of questions deal with Cost Performance Reports and your opinions concerning CPRs.

16. Considering the contract itself as CWBS Level 1, what is the lowest CWBS level regularly reported by you to the government on Format 1 of the Cost Performance Report?

- Check
only
one*
- 1 ☐ Level 2
 - 2 ☐ Level 3
 - 3 ☐ Level 4
 - 4 ☐ Level 5
 - 5 ☐ Level 6
 - 6 ☐ Level 7
 - 7 ☐ Level 8
 - 8 ☐ Level 9 or lower

17. Do you consider the level of reporting required under your contract in terms of its depth within the CWBS to be . . . ?

- Check
only
one*
- 1 ☐ Too low
 - 2 ☐ Too high
 - 3 ☐ Just about right
 - 4 ☐ No opinion

18. In your opinion, how effectively does the DoD Program Office to which you submit Cost Performance Reports use the data?

- Check
only
one*
- 1 ☐ Very effectively
 - 2 ☐ Somewhat effectively
 - 3 ☐ Not at all effectively
 - 4 ☐ No opinion

19. For each of the following report format areas, please indicate the extent to which you believe the data requested by the DoD Program Office is excessive to the DoD Program Office's needs:

Check one box for each item

	Extremely Excessive	Somewhat Excessive	Not Excessive
a. Format 1 - CWBS levels	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
b. Format 2 - Organization levels	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
c. Format 3 - Baseline information	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
d. Format 4 - Manpower information	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
e. Format 5 - Problem analysis	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>

20. In your opinion, could the number of pages of internal reports generated each month from your C/SCSC-accepted system be reduced without hampering your ability to manage the contract?

Check one

1 ☐ Yes

2 ☐ No → SKIP TO Q.22

IF "YES"

21. Please give your rough estimate on the percentage of pages that could be eliminated.

Check only one

1 ☐ 1 - 5 percent

2 ☐ 6 - 10 percent

3 ☐ 11 - 20 percent

4 ☐ 21 - 30 percent

5 ☐ 31 - 40 percent

6 ☐ 41 - 50 percent

7 ☐ 51 - 75 percent

8 ☐ Over 75 percent

22. In your view, how accurately (for the "as of" date of the report) does the Cost Performance Report portray the cost and schedule status of your contract?

- 1 ☐ Very accurately
2 ☐ Somewhat accurately
3 ☐ Not too accurately
4 ☐ Not at all accurately

*Check
only
one*

23. How often does your company Program Manager personally review reports of any type either generated directly by your C/SCSC-accepted system or derived from your system?

- 1 ☐ Daily
2 ☐ Weekly
3 ☐ Biweekly
4 ☐ Monthly
5 ☐ Quarterly
6 ☐ Less often than quarterly
7 ☐ Never

*Check
only
one*

24. Approximately how many calendar weeks after the close of your monthly reporting period does your company provide C/SCSC-related reports to your Cost Account Managers?

- 1 ☐ Less than 1 week
2 ☐ At least 1 week but less than 2
3 ☐ At least 2 weeks but less than 3
4 ☐ At least 3 weeks but less than 4
5 ☐ 4 weeks or more

*Check
only
one*

25. Approximately how many calendar weeks after the close of your monthly reporting period does your company forward Cost Performance Reports to the government?

- Check
only
one*
- 1 ☐ Less than 1 week
 - 2 ☐ At least 1 week but less than 2
 - 3 ☐ At least 2 weeks but less than 3
 - 4 ☐ At least 3 weeks but less than 4
 - 5 ☐ At least 4 weeks but less than 5
 - 6 ☐ 5 weeks or more

26. Approximately how many man-years per year of all categories of employees are spent on operating your C/SCSC-accepted system for this contract and analyzing its output?

- Check
only
one*
- 1 ☐ 2 man-years or less
 - 2 ☐ 3 - 5 man-years
 - 3 ☐ 6 - 10 man-years
 - 4 ☐ 11 - 15 man-years
 - 5 ☐ 16 - 20 man-years
 - 6 ☐ 21 - 25 man-years
 - 7 ☐ 25 - 30 man-years
 - 8 ☐ 31 - 50 man-years
 - 9 ☐ Over 50 man-years
 - 10 ☐ Don't know, too difficult to estimate

Please indicate whether you agree, disagree, or have no opinion concerning the following statements in questions 27 through 34:

27. The in-plant government people such as DCAS or AFPROs have a variety of responsibilities, with C/SCSC usually being very low on their priority list.

*Check
only
one*

- 1 ☐ Agree strongly
- 2 ☐ Agree somewhat
- 3 ☐ Disagree somewhat
- 4 ☐ Disagree strongly
- 5 ☐ Neither agree nor disagree

28. The in-plant government people do not have much, if any, expertise in C/SCSC.

*Check
only
one*

- 1 ☐ Agree strongly
- 2 ☐ Agree somewhat
- 3 ☐ Disagree somewhat
- 4 ☐ Disagree strongly
- 5 ☐ Neither agree nor disagree

29. C/SCSC-driven internal cost and schedule reports are received on a sufficiently timely basis so as to be useful to your Program Office in determining cost and/or schedule status.

*Check
only
one*

- 1 ☐ Agree strongly
- 2 ☐ Agree somewhat
- 3 ☐ Disagree somewhat
- 4 ☐ Disagree strongly
- 5 ☐ Neither agree nor disagree

30. DoD C/SCSC practices for this contract were not effective in ensuring that an adequate basis existed in your company's system for reporting cost and schedule status.

*Check
only
one*

- 1 ☐ Agree strongly
2 ☐ Agree somewhat
3 ☐ Disagree somewhat
4 ☐ Disagree strongly
5 ☐ Neither agree nor disagree

31. The costs to your company (and to DoD) in terms of time and manpower expended to operate the C/SCSC-accepted system are outweighed by the benefits derived by your Program Office in managing the contract.

*Check
only
one*

- 1 ☐ Agree strongly
2 ☐ Agree somewhat
3 ☐ Disagree somewhat
4 ☐ Disagree strongly
5 ☐ Neither agree nor disagree

32. The concept of using criteria on what is an acceptable cost and schedule control system rather than specifying a single system for all contractors to use is not valid.

*Check
only
one*

- 1 ☐ Agree strongly
2 ☐ Agree somewhat
3 ☐ Disagree somewhat
4 ☐ Disagree strongly
5 ☐ Neither agree nor disagree

33. The C/SCSC approach of ensuring an adequate basis for keeping your Program Office informed on the cost and schedule status of a contract is as good or better than other approaches to achieving the same objectives.

*Check
only
one*

1 ☐ Agree strongly
2 ☐ Agree somewhat
3 ☐ Disagree somewhat
4 ☐ Disagree strongly
5 ☐ Neither agree nor disagree

34. The specific cost and schedule control systems criteria as currently delineated by DoD are not appropriate for evaluating whether your company's system provides an adequate basis for properly indicating cost and schedule status on this type of contract.

*Check
only
one*

1 ☐ Agree strongly
2 ☐ Agree somewhat
3 ☐ Disagree somewhat
4 ☐ Disagree strongly
5 ☐ Neither agree nor disagree

35. To the best of your knowledge, how frequently does the government C/SCSC Surveillance Monitor have contact with your company?

*Check
only
one*

1 ☐ Daily
2 ☐ Weekly
3 ☐ Monthly
4 ☐ Less often than monthly
5 ☐ Don't know

36. Does your company have an in-house recurring training program for managers on how to use internal reports from your C/SCSC-accepted system?

*Check
one*

1 ☐ Yes
2 ☐ No

37. Finally, please give us your thoughts on what steps DoD might take to improve the usefulness of C/SCSC to you and/or to the DoD itself. If you wish to comment about any other aspect of C/SCSC, we welcome such observations. These comments, as well as all other information provided in this questionnaire, will remain completely confidential. Your responses will never be associated with any information by which you can be personally identified. If you choose to respond -- and we hope you will -- please use the space below and feel free to add extra pages as necessary. We would appreciate hearing from you.

APPENDIX 2

COMPARATIVE TABULATION OF RESPONSES

This appendix contains the tabulation of responses for the four (4) questionnaires. The tabulations are listed in the order of the analyses contained in Section III and the summary profiles contained in Appendix 3. The tabulations for the analyses contained in Section III start on page A2-2. The tabulations for the summary contained in Appendix 3 start on page A2-44.

**C/SCSC SURVEY
TABULATION & COMPARISON OF RESPONSES**

ISSUE/QUESTIONS	PROGRAM MANAGERS				BUSINESS MANAGERS				ANALYSIS REPORT PARA. NO.	QUESTION			NUMBER	
	Government		Contractor		Government		Contractor			GPM	CPM	GBM	CBM	
	No.	%	No.	%	No.	%	No.	%						
<u>ISSUE #1 COST/BENEFIT</u> <u>Benefits and Effectiveness</u> A major benefit of C/SCSC is that it forces a contractor to do planning that otherwise would not have been accomplished as thoroughly. ● Agree strongly ● Agree somewhat ● Disagree somewhat ● Disagree strongly ● Neither agree nor disagree														
	39	35.1	39	27.7	-	-	-	-						
	47	42.3	65	46.1	-	-	-	-						
	14	12.6	16	11.3	-	-	-	-						
	11	9.9	19	13.5	-	-	-	-						
	0	-	2	1.4	-	-	-	-						
In your judgment, how effective has your C/SCSC-accepted system been in assisting you and your staff to keeping your program on schedule and within cost limits? ● Very Effective ● Somewhat effective ● Not too effective ● Not at all effective														
	-	-	33	23.4	-	-	-	-						
	-	-	67	47.5	-	-	-	-						
	-	-	32	22.7	-	-	-	-						
	-	-	9	6.4	-	-	-	-						

**C/SCSC SURVEY
TABULATION & COMPARISON OF RESPONSES**

ISSUE/QUESTIONS	PROGRAM MANAGERS						BUSINESS MANAGERS						ANALYSIS REPORT PARA. NO.	QUESTION			NUMBER	
	Government			Contractor			Government			Contractor				GPM	CPM	GBM	CBM	
	No.	%	No.	%	No.	%	No.	%	No.	%								
The contractor's cost and schedule control systems and procedures used for this contract are effective in helping management to control contract performance. ● Agree strongly ● Agree somewhat ● Disagree somewhat ● Disagree strongly ● Neither agree nor disagree ● No response	-	-	-	-	42	28.8	-	-	-	-	-					26		
	-	-	-	-	75	51.4	-	-	-	-	-							
	-	-	-	-	18	12.3	-	-	-	-	-							
	-	-	-	-	3	2.1	-	-	-	-	-							
	-	-	-	-	6	4.1	-	-	-	-	-							
	-	-	-	-	2	1.4	-	-	-	-	-							
<u>Accuracy and Usefulness</u> Please rate the Cost Performance Reports (CPRs) in terms of how well they help in doing each of the following: Please rate your C/SCSC-driven internal cost and schedule reports in terms of how well they help in doing each of the following: Please rate the Cost Performance Reports (CPRs) or data directly derived from CPRs in terms of how well they help in doing each of the following:																		

C/SCSC SURVEY
TABULATION & COMPARISON OF RESPONSES

ISSUE/QUESTIONS	PROGRAM MANAGERS				BUSINESS MANAGERS				ANALYSIS REPORT PARA. NO.	QUESTION			NUMBER	
	Government		Contractor		Government		Contractor			GPM	CPM	GBM		CBM
	No.	%	No.	%	No.	%	No.	%						
● Providing an indicator of contract schedule status	5	4.5	15	10.6	22	15.1	-	-						
	37	33.3	51	36.2	53	36.3	-	-						
	39	35.1	47	33.3	43	29.5	-	-						
	26	23.4	26	18.4	27	18.5	-	-						
	4	3.6	2	1.4	1	0.7								
● Determining contract cost status	20	18.0	32	22.7	52	35.6	-	-						
	62	55.9	80	56.7	69	47.3	-	-						
	19	17.1	25	17.7	19	13.0	-	-						
	7	6.3	2	1.4	5	3.4	-	-						
	3	2.7	2	1.4	1	0.7								
● Identifying problem areas not previously recognized	4	3.6	7	5	12	8.2	-	-						
	19	17.1	33	23.4	41	28.1	-	-						
	44	39.6	48	34.0	59	40.4	-	-						
	41	36.9	49	34.8	30	20.5	-	-						
	3	2.7	4	2.8	4	2.7	-	-						
● Providing the capability of tracing problems to their sources	5	4.5	14	9.9	17	11.6	-	-						
	29	26.1	56	39.7	64	43.8	-	-						
	41	36.9	40	28.4	47	32.2	-	-						
	31	27.9	25	17.7	16	11.0	-	-						
	5	4.5	6	4.3	2	1.4	-	-						

C/SCSC SURVEY
TABULATION & COMPARISON OF RESPONSES

ISSUE/QUESTIONS	PROGRAM MANAGERS				BUSINESS MANAGERS				ANALYSIS REPORT PARA. NO.	QUESTION			NUMBER		
	Government		Contractor		Government		Contractor			GPM	CPM	GBM	CBM		
	No.	%	No.	%	No.	%	No.	%							
● Identifying cost impacts of known problems	11	9.9	23	16.3	26	17.8	-	-							
	35	31.5	49	34.8	62	42.5	-	-							
	43	38.5	40	28.4	45	30.8	-	-							
	19	17.1	26	18.4	11	7.5	-	-							
	3	2.7	3	2.1	2	1.4	-	-							
● Estimating costs to complete	10	9.0	21	14.9	28	19.2	-	-							
	44	39.6	57	40.4	68	46.6	-	-							
	43	38.7	46	32.6	37	25.3	-	-							
	9	8.1	14	9.9	11	7.5	-	-							
	5	4.5	3	2.1	2	1.4	-	-							
In your view, how accurately (for the "as of" date of the report) do the Cost Performance portray the cost and schedule status of the contract(s) for your program/contract?													23		22
	-	-	56	39.7	-	-	61	44.9							
	-	-	72	51.1	-	-	64	47.1							
	-	-	12	8.5	-	-	9	6.6							
	-	-	1	0.7	-	-	1	0.7							
● Very accurately	-	-	-	-	-	-	-	-							
● Somewhat accurately	-	-	-	-	-	-	-	-							
● Not too accurately	-	-	-	-	-	-	-	-							
● Not at all accurately	-	-	-	-	-	-	-	-							
● No response	-	-	-	-	-	-	-	-							

C/SCSC SURVEY
TABULATION & COMPARISON OF RESPONSES

ISSUE/QUESTIONS	PROGRAM MANAGERS				BUSINESS MANAGERS				ANALYSIS REPORT PARA. NO.	QUESTION			NUMBER	
	Government		Contractor		Government		Contractor			GPM	CPM	GBM	CBM	
	No.	%	No.	%	No.	%	No.	%						
The contractor's cost schedule and control system provides internal data for this contract which indicate work progress, properly relate cost, schedule and technical accomplishment, are valid, timely and audit-able, and supply the Program Office with information at a practicable level of summarization. ● Agree strongly ● Agree somewhat ● Disagree somewhat ● Disagree strongly ● Neither agree nor disagree	-	-	-	-	40	27.4	-	-					28	
	-	-	-	-	77	52.7	-	-						
	-	-	-	-	21	14.4	-	-						
	-	-	-	-	5	3.4	-	-						
	-	-	-	-	3	2.1	-	-						
<u>Cost/Benefit</u> The costs to the Program Office in terms of time and manpower expended for all C/SCSC-related activities are outweighed by the benefits derived by the Program Office in managing this contract.									1.3.3	16			31	

C/SCSC SURVEY
TABULATION & COMPARISON OF RESPONSES

ISSUE/QUESTIONS	PROGRAM MANAGERS				BUSINESS MANAGERS				ANALYSIS REPORT PARA. NO.	QUESTION			NUMBER	
	Government		Contractor		Government		Contractor			GPM	CPM	GBM		CBM
	No.	%	No.	%	No.	%	No.	%						
The costs to your company (and to DoD) in terms of time and manpower expended to operate the C/SCSC-accepted system are outweighed by the benefits derived by your Program Office in managing the contract. • Agree strongly • Agree somewhat • Disagree somewhat • Disagree strongly • Neither agree nor disagree													31	
	25	22.5	-	-	40	27.5	33	24.3						
	40	36.0	-	-	50	34.3	42	30.9						
	25	22.5	-	-	24	16.5	34	25.0						
	15	13.5	-	-	26	17.9	25	18.4						
	6	5.4	-	-	4	2.8	2	1.5						
The costs to your company (and to DoD) in terms of time and manpower expended to operate the C/SCSC-accepted system are outweighed by the benefits derived by your Program Office in managing the contract. • Agree strongly • Agree somewhat • Disagree somewhat • Disagree strongly • Neither agree nor disagree											20			
	-	-	22	15.6	-	-	-	-						
	-	-	53	37.6	-	-	-	-						
	-	-	35	24.8	-	-	-	-						
	-	-	25	17.7	-	-	-	-						
	-	-	6	4.3	-	-	-	-						

C/SCSC SURVEY
TABULATION & COMPARISON OF RESPONSES

ISSUE/QUESTIONS	PROGRAM MANAGERS				BUSINESS MANAGERS				ANALYSIS REPORT PARA. NO.	QUESTION			NUMBER		
	Government		Contractor		Government		Contractor			GPM	CPM	GBM		CBM	
	No.	%	No.	%	No.	%	No.	%							
<u>Choice of Use</u> If you had the choice of whether or not you would require your contractor(s) to have a C/SCSC-accepted system(s), would you: ● Continue to require the currently accepted cost and schedule control system(s) as operating now ● Require the current system(s) with minor modifications ● Require the current system(s) with major modifications ● Not require the current system(s) at all?															
	43	38.7	-	-	-	-	-	-						5	
	45	40.5	-	-	-	-	-	-							
	15	13.5	-	-	-	-	-	-							
	7	6.3	-	-	-	-	-	-							
If you had the choice of whether or not you would use your C/SCSC-accepted system to assist you in managing your program, would you: ● Continue to use the C/SCSC-accepted system as it is currently operating now ● Use your C/SCSC-accepted system with minor modifications														5	
	-	-	30	21.3	-	-	-	-							
	-	-	80	56.7	-	-	-	-							

**C/SCSC SURVEY
TABULATION & COMPARISON OF RESPONSES**

ISSUE/QUESTIONS	PROGRAM MANAGERS				BUSINESS MANAGERS				ANALYSIS REPORT PARA. NO.	QUESTION			NUMBER	
	Government		Contractor		Government		Contractor			GPM	CPM	GBM	CBM	
	No.	%	No.	%	No.	%	No.	%						
<ul style="list-style-type: none">● Use your C/SCSC-accepted system with major modifications● Not use the C/SCSC-accepted system at all?	-	-	22	15.6	-	-	-	-						
	-	-	8	5.7	-	-	-	-						
Please indicate the response that best describes how often your company uses its C/SCSC-accepted system on DoD contracts, when C/SCSC is <u>not</u> a contractual requirement											9			
<ul style="list-style-type: none">● All of the time● Some of the time● Never● Don't know	-	-	27	19.1	-	-	-	-						
	-	-	65	46.1	-	-	-	-						
	-	-	30	21.3	-	-	-	-						
	-	-	19	13.5	-	-	-	-						
Please indicate the response that best describes how often your company uses an internally tailored earned-value system on DoD contracts, when earned-value is <u>not</u> a contractual requirement											10			
<ul style="list-style-type: none">● All of the time● Some of the time● Never● Don't know	-	-	33	23.5	-	-	-	-						
	-	-	68	48.3	-	-	-	-						
	-	-	17	12.5	-	-	-	-						
	-	-	22	15.6	-	-	-	-						

C/SCSC SURVEY
TABULATION & COMPARISON OF RESPONSES

ISSUE/QUESTIONS	PROGRAM MANAGERS				BUSINESS MANAGERS				ANALYSIS REPORT PARA. NO.	QUESTION			NUMBER	
	Government		Contractor		Government		Contractor			GPM	CPM	GBM	CBM	
	No.	%	No.	%	No.	%	No.	%						
Does your company have commercial work? Yes No	-	-	70	49.6	-	-	-	-					11	
	-	-	71	50.4	-	-	-	-						
	-	-											12	
	-	-	5	7.1	-	-	-	-						
	-	-	11	15.7	-	-	-	-						
Please indicate the response that best describes how often your company uses its C/SCSC-accepted system on commercial work. • All of the time • Some of the time • Never • Don't know	-	-	28	40.0	-	-	-	-						
	-	-	26	37.1	-	-	-	-						
	-	-												
	-	-												
	-	-												
Please indicate the response that best describes how often your company uses an internally tailored earned-value system on commercial work. • All of the time • Some of the time • Never • Don't know	-	-	9	12.9	-	-	-	-					13	
	-	-	18	25.7	-	-	-	-						
	-	-	14	20.2	-	-	-	-						
	-	-	28	40.2	-	-	-	-						
	-	-												

C/SCSC SURVEY
TABULATION & COMPARISON OF RESPONSES

ISSUE/QUESTIONS	PROGRAM MANAGERS				BUSINESS MANAGERS				ANALYSIS REPORT PARA. NO.	QUESTION			NUMBER	
	Government		Contractor		Government		Contractor			GPM	CPM	GBM	CBM	
	No.	%	No.	%	No.	%	No.	%						
<u>Cost of Operation</u>									1.3.5					26
Approximately how many man-years per year of all categories of employees are spent on operating your C/SCSC-accepted system for this contract and analyzing its output?														
• 2 man-years or less	-	-	-	-	-	-	-	6	4.4					
• 3-5 man-years	-	-	-	-	-	-	-	11	11.0					
• 6-10 man-years	-	-	-	-	-	-	-	32	23.5					
• 11-15 man-years	-	-	-	-	-	-	-	24	17.6					
• 16-20 man-years	-	-	-	-	-	-	-	10	7.4					
• 21-25 man-years	-	-	-	-	-	-	-	3	2.2					
• 25-30 man-years	-	-	-	-	-	-	-	9	6.6					
• 31-50 man-years	-	-	-	-	-	-	-	6	4.4					
• Over 50 man-years	-	-	-	-	-	-	-	9	6.6					
• Don't know	-	-	-	-	-	-	-	22	16.2					

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ISSUE/QUESTIONS	PROGRAM MANAGERS				BUSINESS MANAGERS				ANALYSIS REPORT PARA. NO.	QUESTION			NUMBER	
	Government		Contractor		Government		Contractor			GPM	CPM	GBM	CBM	
	No.	%	No.	%	No.	%	No.	%						
2. CRITERIA CONCEPT & APPROACH														
<u>Validity of Concept</u> The concept of using criteria on what is an acceptable cost and schedule control system rather than specifying a single system for all contractors to use is not valid:									2.0 2.3.1	10	14			32
• Agree strongly	8	7.2	9	6.4	-	-	6	4.4						
• Agree somewhat	11	9.9	7	5.0	-	-	5	3.7						
• Disagree somewhat	22	19.8	26	18.4	-	-	24	17.6						
• Disagree strongly	63	56.8	89	63.1	-	-	95	69.9						
• Neither agree nor disagree	6	6.3	10	7.1	-	-	6	4.4						
<u>Appropriateness</u> The specific Cost and Schedule System criteria as currently delineated by DoD are not appropriate for evaluating whether a contractor's system provides an adequate basis for properly indicating cost and schedule status.									2.3.1	12	16	27		34
• Agree strongly	5	4.5	11	7.8	4	2.7	6	4.4						
• Agree somewhat	17	15.3	27	19.1	20	13.7	27	19.9						

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ISSUE/QUESTIONS	PROGRAM MANAGERS						BUSINESS MANAGERS				ANALYSIS REPORT PARA. NO.	QUESTION			NUMBER	
	Government		Contractor		Government		Contractor		GPM	CPM		GBM	CBM			
	No.	%	No.	%	No.	%	No.	%								
<ul style="list-style-type: none">Disagree somewhatDisagree stronglyNeither agree nor disagree	38	34.2	56	39.7	46	31.5	53	39.0								
	41	36.9	33	23.4	66	45.2	41	30.1								
	10	9.0	14	9.9	10	6.9	9	6.6								
<u>Ensure System Adequacy</u> The C/SCSC approach of ensuring an adequate basis for keeping the Program Office informed on the cost and schedule status of a contract is as good or better than other approaches to achieving the same objectives:											2.3.1	11	15			33
<ul style="list-style-type: none">Agree stronglyAgree somewhatDisagree somewhatDisagree stronglyNeither agree nor disagree	29	26.1	38	27.0	-	-	40	29.4								
	52	46.8	70	49.6	-	-	65	47.8								
	15	13.5	19	13.5	-	-	17	12.5								
	5	4.5	12	8.5	-	-	8	5.9								
	10	9.0	2	1.4	-	-	6	4.4								
<u>DoD Practices</u> DoD C/SCSC practices are not effective in ensuring that an adequate basis exists in a contractor's system for reporting cost and schedule status to the program manager.											2.3.1	14	18	29		30

C/SCSC SURVEY

TABULATION & COMPARISON OF RESPONSES

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TABULATION & COMPARISON OF RESPONSES

ISSUE/QUESTIONS	PROGRAM MANAGERS						BUSINESS MANAGERS						ANALYSIS REPORT PARA. NO.	QUESTION			NUMBER	
	Government			Contractor			Government			Contractor				GPM	CPM	GBM	CBM	
	No.	%	No.	%	No.	%	No.	%	No.	%								
3. REVIEW PROCESS <u>Participation</u> Did Program Office representative(s) participate in the review? Yes No No Response What organizations were represented? • Program Office • Service C/SCSC Focal Point, i.e., HQ DARCOM, HQ NAVMAT, HQ AFSC • Government plant representatives, e.g., DCAS, AFPRO, NAVPRO, etc. • Commodity Command, e.g., MICOM, ASD, NAVAIR, etc. • DCAA • Other (multiple answers)	-	-	-	-	136	93.2	-	-				3.0					12b	
	-	-	-	-	5	3.4	-	-				3.3.1						
	-	-	-	-	5	3.4	-	-										
	-	-	-	-														
	-	-	-	-														
	-	-	-	-														
	-	-	-	-														
	-	-	-	-														
	-	-	-	-														
	-	-	-	-														

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TABULATION & COMPARISON OF RESPONSES

ISSUE/QUESTIONS	PROGRAM MANAGERS				BUSINESS MANAGERS				ANALYSIS REPORT PARA. NO.	QUESTION			NUMBER	
	Government		Contractor		Government		Contractor			GPM	CPM	GBM	CBM	
	No.	%	No.	%	No.	%	No.	%						
<u>Participation Need</u> In your view, how necessary is the participation of the following to the C/SCSC review process? • Commodity Command participation, e.g., ASD, NAVAIR, MICOM, etc. Very necessary Somewhat necessary Not necessary • Service C/SCSC Focal Point participation, i.e., HQ DARCOM, HQ NAVMAT, HQ AFSC Very necessary Somewhat necessary Not necessary • Contract Administration Office participation, e.g., DCAS, AFPRO, etc. Very necessary Somewhat necessary Not necessary	-	-	-	-	79	55.2	-	-	3.3.2			14		
	-	-	-	-	26	18.2	-	-						
	-	-	-	-	38	26.5	-	-						
	-	-	-	-										
	-	-	-	-	66	45.4	-	-						
	-	-	-	-	42	29.0	-	-						
	-	-	-	-	37	25.6	-	-						
	-	-	-	-										
	-	-	-	-	132	90.5	-	-						
	-	-	-	-	9	6.6	-	-						
	-	-	-	-	4	2.9	-	-						
	-	-	-	-										
	-	-	-	-										
	-	-	-	-										

C/SCSC SURVEY
TABULATION & COMPARISON OF RESPONSES

ISSUE/QUESTIONS	PROGRAM MANAGERS						BUSINESS MANAGERS						ANALYSIS REPORT PARA. NO.	QUESTION			NUMBER												
	Government			Contractor			Government			Contractor				GPM	CPM	GBM	CBM												
	No.	%		No.	%		No.	%		No.	%																		
<ul style="list-style-type: none">• Defense Contract Audit Agency (DCAA) participationVery necessarySomewhat necessaryNot necessary• Program Office participationVery necessarySomewhat necessaryNot necessary	-	-	-	-	-	-	92	63.9	-	-	-	-																	
	-	-	-	-	-	-	44	30.5	-	-	-	-																	
	-	-	-	-	-	-	8	5.6	-	-	-	-																	
	-	-	-	-	-	-	129	88.4	-	-	-	-																	
	-	-	-	-	-	-	15	10.3	-	-	-	-																	
<ul style="list-style-type: none">• DurationWhat was the duration of the review in workdays (answered in reference only to the <u>one</u> visit that you consider to have been the <u>key</u> DoD C/SCSC review for this contract).• Under 3 workdays• 3-5 workdays• 6-10 workdays• 11-15 workdays• More than 15 workdays• No response	-	-	-	-	-	-	7	5.1	9	6.6	73	53.7	65	47.8	25	18.4	36	26.5	23	16.9	14	10.3	5	3.7	3.3.3			12d 11c	
	-	-	-	-	-	-	73	53.7	65	47.8	25	18.4	36	26.5	23	16.9	14	10.3	5	3.7	7	5.1	3	2.2	5	3.7			
	-	-	-	-	-	-	25	18.4	36	26.5	23	16.9	14	10.3	5	3.7	7	5.1	3	2.2	5	3.7							
	-	-	-	-	-	-	5	3.7	7	5.1	3	2.2	5	3.7															
	-	-	-	-	-	-	3	2.2	5	3.7																			

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ISSUE/QUESTIONS	PROGRAM MANAGERS				BUSINESS MANAGERS				ANALYSIS REPORT PARA. NO.	QUESTION			NUMBER	
	Government		Contractor		Government		Contractor			GPM	CPM	GBM	CBM	
	No.	%	No.	%	No.	%	No.	%						
<u>Team Size</u>														
What was the size of the Review Team (based on your recollection of the <u>key</u> review)														
• Less than 4 persons	-	-	-	-	7	5.1	2	1.5	3.3.4			12e	11d	
• 4-7 persons	-	-	-	-	32	23.5	25	18.4						
• 8-11 persons	-	-	-	-	57	41.9	59	43.4						
• 12-15 persons	-	-	-	-	29	21.3	22	16.2						
• 16-19 persons	-	-	-	-	7	5.1	14	10.3						
• 20-23 persons	-	-	-	-	2	1.5	3	2.2						
• No response	-	-	-	-	2	1.5	5	3.7						
<u>Discrepancies</u>									3.3.5			12f	11e	
Approximately how many discrepancies or corrective action items were identified by the DoD Review Team?														
• 10 or less	-	-	-	-	71	52.2	78	57.4						
• 11-20	-	-	-	-	26	19.1	25	18.4						
• 21-30	-	-	-	-	10	7.4	10	7.4						
• 31-40	-	-	-	-	7	5.1	8	5.9						
• 41-50	-	-	-	-	1	0.7	2	1.5						
• More than 50	-	-	-	-	1	0.7	3	2.2						

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ISSUE/QUESTIONS	PROGRAM MANAGERS				BUSINESS MANAGERS				ANALYSIS REPORT PARA. NO.	QUESTION			NUMBER	
	Government		Contractor		Government		Contractor			GPM	CPM	GBM	CBM	
	No.	%	No.	%	No.	%	No.	%						
● Don't know, too difficult to approximate	-	-	-	-	17	12.5	3	2.2						
● No response	-	-	-	-	3	2.2	7	5.1						
Team Performance									3.3.6					11f
How would you rate the review team's performance on each of the following characteristics using the scale provided?														
● Team leadership and control														
Excellent	-	-	-	-	-	-	42	30.9						
Good	-	-	-	-	-	-	65	47.8						
Fair	-	-	-	-	-	-	17	12.5						
Poor	-	-	-	-	-	-	6	4.4						
No opinion	-	-	-	-	-	-	6	4.4						
● Technical qualifications of the team														
Excellent	-	-	-	-	-	-	20	14.7						
Good	-	-	-	-	-	-	67	49.3						
Fair	-	-	-	-	-	-	40	29.4						
Poor	-	-	-	-	-	-	3	2.2						
No opinion	-	-	-	-	-	-	6	4.4						

**C/SCSC SURVEY
TABULATION & COMPARISON OF RESPONSES**

ISSUE/QUESTIONS	PROGRAM MANAGERS				BUSINESS MANAGERS				ANALYSIS REPORT PARA. NO.	QUESTION			NUMBER	
	Government		Contractor		Government		Contractor			GPM	CPM	GBM		
	No.	%	No.	%	No.	%	No.	%						
● Team working relationships with your company	-	-	-	-	-	-	-	59	43.4					
	-	-	-	-	-	-	-	65	47.8					
	-	-	-	-	-	-	-	5	3.7					
	-	-	-	-	-	-	-	1	0.7					
	-	-	-	-	-	-	-	6	4.4					
● Thoroughness of team's review	-	-	-	-	-	-	-	24	17.6					
	-	-	-	-	-	-	-	62	45.6					
	-	-	-	-	-	-	-	31	22.8					
	-	-	-	-	-	-	-	13	9.6					
	-	-	-	-	-	-	-	6	4.4					
● Overall team professionalism and effectiveness	-	-	-	-	-	-	-	30	22.1					
	-	-	-	-	-	-	-	80	58.8					
	-	-	-	-	-	-	-	18	13.2					
	-	-	-	-	-	-	-	1	0.7					
	-	-	-	-	-	-	-	7	5.1					

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ISSUE/QUESTIONS	PROGRAM MANAGERS				BUSINESS MANAGERS				ANALYSIS REPORT PARA. NO.	QUESTION			NUMBER	
	Government		Contractor		Government		Contractor			GPM	CPM	GBM	CBM	
	No.	%	No.	%	No.	%	No.	%						
<u>Cost</u> Based on your recollection of the entire review process, please estimate how many man-days were spent by your company in support of the entire review process over and above the normal expenditures for the day-to-day operation of your cost and schedule control system. (Do not include work devoted to system implementation, establishing the performance measurement baseline or for operating the internal cost/schedule control system.)	-	-	-	-	-	-	-	-	3.3.7				12	
• 0-10 man-days	-	-	-	-	-	-	-	5	3.7					
• 11-25 man-days	-	-	-	-	-	-	-	16	11.8					
• 26-50 man-days	-	-	-	-	-	-	-	18	13.2					
• 51-100 man-days	-	-	-	-	-	-	-	21	15.4					
• 101-150 man-days	-	-	-	-	-	-	-	22	16.2					
• 151-200 man-days	-	-	-	-	-	-	-	17	12.5					
• 201-250 man-days	-	-	-	-	-	-	-	5	3.7					
• 251-300 man-days	-	-	-	-	-	-	-	3	2.2					
• Over 300 man-days	-	-	-	-	-	-	-	23	16.9					
• No response	-	-	-	-	-	-	-	6	4.4					

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ISSUE/QUESTIONS	PROGRAM MANAGERS				BUSINESS MANAGERS				ANALYSIS REPORT PARA. NO.	QUESTION			NUMBER	
	Government		Contractor		Government		Contractor			GPM	CPM	GBM		CBM
	No.	%	No.	%	No.	%	No.	%						
<u>Cost/Benefit</u> In your opinion, did the bene- fits to your company from the review process outweigh its costs to your company? Yes No No opinion	-	-	-	-	-	-	-	48	35.3					13
	-	-	-	-	-	-	-	67	49.3					
	-	-	-	-	-	-	-	21	15.4					
<u>Need for Reviews</u> All things considered, how necessary is the entire C/SCSC review process itself to the proper functioning of the contractor's cost and schedule control system? • Very necessary • Somewhat necessary • Not necessary • No response	-	-	-	-	106	72.6	-	-	-					15
	-	-	-	-	34	23.3	-	-	-					
	-	-	-	-	3	2.1	-	-	-					
	-	-	-	-	3	2.0	-	-	-					

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	Government		Contractor		Government		Contractor			GPM	CPM	GBM		CBM
	No.	%	No.	%	No.	%	No.	%						
4.0 CONSISTENCY OF APPLICATION									4.0				11g	
To the best of your knowledge, were this review team's C/SCSC interpretations reasonably consistent with other DoD review teams' interpretations?	-	-	-	-	-	-	89	65.4						
	-	-	-	-	-	-	13	9.6						
	-	-	-	-	-	-	34	25.0						
Yes														
No														
No Opinion														

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ISSUE/QUESTIONS	PROGRAM MANAGERS				BUSINESS MANAGERS				ANALYSIS REPORT PARA. NO.	QUESTION			NUMBER	
	Government		Contractor		Government		Contractor			GPM	CPM	GBM	CBM	
	No.	%	No.	%	No.	%	No.	%						
5.0 <u>IMPLEMENTATION TIME ALLOWANCES</u>									5.0				10	
Approximately how many months after contract award did the contractor establish the C/SCSC performance measurement baseline?									5.3.1					
Approximately how many months after contract award was the C/SCSC performance measurement baseline established?														
• Less than 3 months	-	-	-	-	45	30.8	35	25.7						
• At least 3 months but less than 6	-	-	-	-	48	32.9	56	41.2						
• At least 6 months but less than 9	-	-	-	-	17	11.6	21	15.4						
• At least 9 months but less than 12	-	-	-	-	13	8.9	6	4.4						
• At least 12 months but less than 15	-	-	-	-	6	4.1	10	7.4						
• At least 15 months but less than 18	-	-	-	-	2	1.4	0	0						
• At least 18 months but less than 21	-	-	-	-	0	0	0	0						
• At least 21 months but less than 24	-	-	-	-	2	1.4	1	0.7						
• 24 months or more	-	-	-	-	6	4.1	4	2.9						
• No response	-	-	-	-	7	4.8	3	2.2						

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ISSUE/QUESTIONS	PROGRAM MANAGERS				BUSINESS MANAGERS				ANALYSIS REPORT PARA. NO.	QUESTION			NUMBER	
	Government		Contractor		Government		Contractor			GPM	CPM	GBM	CBM	
	No.	%	No.	%	No.	%	No.	%						
<u>PMB Expected Time</u> Approximately how many months after contract award would have been the earliest you could reasonably have expected the C/SCSC performance measurement baseline to have been established by the contractor?									5.3.3				11	
• Less than 3 months	-	-	-	-	49	33.6	-	-						
• At least 3 months but less than 6	-	-	-	-	62	42.5	-	-						
• At least 6 months but less than 9	-	-	-	-	17	11.6	-	-						
• At least 9 months but less than 12	-	-	-	-	7	4.8	-	-						
• At least 12 months but less than 15	-	-	-	-	4	2.7	-	-						
• At least 15 months but less than 18	-	-	-	-	1	0.7	-	-						
• At least 18 months but less than 21	-	-	-	-	0	0	-	-						
• At least 21 months but less than 24	-	-	-	-	1	0.7	-	-						
• 24 months or more	-	-	-	-	2	1.4	-	-						
• No response	-	-	-	-	3	2.1	-	-						

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ISSUE/QUESTIONS	PROGRAM MANAGERS				BUSINESS MANAGERS				ANALYSIS REPORT PARA. NO.	QUESTION			NUMBER	
	Government		Contractor		Government		Contractor			GPM	CPM	GBM	CBM	
	No.	%	No.	%	No.	%	No.	%						
<u>Elapsed Time to Review</u> Approximately how many months after contract award was the Demonstration Review or the Subsequent Application Review held?									5.3.4			12a	11a	
• Less than 3 months	-	-	-	-	7	4.8	2	1.5						
• At least 3 months but less than 6	-	-	-	-	38	26.0	28	20.6						
• At least 6 months but less than 12	-	-	-	-	53	36.3	55	40.4						
• At least 12 months but less than 18	-	-	-	-	22	15.1	21	15.4						
• At least 18 months but less than 24	-	-	-	-	6	4.1	11	8.1						
• At least 24 months but less than 30	-	-	-	-	6	4.1	7	5.1						
• At least 30 months but less than 36	-	-	-	-	0	0	4	2.9						
• 36 months or more	-	-	-	-	4	2.7	3	2.2						
• No response	-	-	-	-	10	6.8	5	3.7						

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TABULATION & COMPARISON OF RESPONSES**

ISSUE/QUESTIONS	PROGRAM MANAGERS				BUSINESS MANAGERS				ANALYSIS REPORT PARA. NO.	QUESTION			NUMBER	
	Government		Contractor		Government		Contractor			GPM	CPM	GBM	CBM	
	No.	%	No.	%	No.	%	No.	%						
Approximately how many months after contract award did you receive official notification from your contracting office that your system had been satisfactorily applied to the contract?	-	-	-	-	-	-	-	21	99.5					14
• Less than 6 months	-	-	-	-	-	-	-	41	30.1					
• At least 6 months but under 12 months	-	-	-	-	-	-	-	24	17.6					
• At least 12 months but under 18 months	-	-	-	-	-	-	-	17	12.7					
• At least 18 months but under 24 months	-	-	-	-	-	-	-	4	2.9					
• At least 24 months but under 30 months	-	-	-	-	-	-	-	2	1.5					
• At least 30 months but under 36 months	-	-	-	-	-	-	-	7	5.1					
• At least 36 months but under 42 months	-	-	-	-	-	-	-	1	0.7					
• At least 42 months but under 48 months	-	-	-	-	-	-	-	1	0.7					
• 48 months or more	-	-	-	-	-	-	-	18	13.2					
• No response	-	-	-	-	-	-	-							

AO-A136 382

SURVEY RELATING TO THE IMPLEMENTATION OF COST/SCHEDULE
CONTROL SYSTEMS CR..(U) LITTLE (ARTHUR D) INC CAMBRIDGE
MA 05 DEC 83 MDA903-82-C-0561

33

UNCLASSIFIED

F/G 5/1

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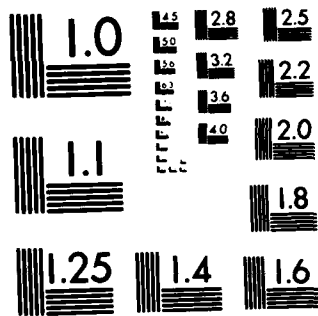
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MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

**C/SCSC SURVEY
TABULATION & COMPARISON OF RESPONSES**

ISSUE/QUESTIONS	PROGRAM MANAGERS				BUSINESS MANAGERS				ANALYSIS REPORT PARA. NO.	QUESTION			NUMBER	
	Government		Contractor		Government		Contractor			GPM	CPM	GBM	CBM	
	No.	%	No.	%	No.	%	No.	%						
6.0 PERFORMANCE REPORTING DEPTH OF DATA									6.0					16
Considering the contract it- self as CWBS Level 1, what is the lowest CWBS level regularly reported to you by the contrac- tor on Format 1 of the Cost Performance Report?									6.3.1					
Considering the contract it- self as CWBS Level 1, what is the lowest CWBS level regularly reported by you to the govern- ment on Format 1 of the Cost Performance Report?														
• Level 2	-	-	-	-	7	4.8	9	6.6						
• Level 3	-	-	-	-	93	63.7	67	49.3						
• Level 4	-	-	-	-	27	18.5	32	23.5						
• Level 5	-	-	-	-	11	7.5	22	16.2						
• Level 6	-	-	-	-	3	2.1	3	2.2						
• Level 7	-	-	-	-	3	2.1	0	0						
• Level 8	-	-	-	-	0	0	0	0						
• Level 9 or lower	-	-	-	-	0	0	0	0						
• No response	-	-	-	-	2	1.4	3	2.2						

**C/SCSC SURVEY
TABULATION & COMPARISON OF RESPONSES**

ISSUE/QUESTIONS	PROGRAM MANAGERS				BUSINESS MANAGERS				ANALYSIS REPORT PARA. NO.	QUESTION			NUMBER	
	Government		Contractor		Government		Contractor			GPM	CPM	GBM	CBM	
	No.	%	No.	%	No.	%	No.	%						
For meaningful contract analysis, this CWBS level, in your opinion, is: Do you consider the level of reporting required under your contract in terms of its depth within the CWBS to be ...? • Too low • Too high • Just about right • No opinion	-	-	-	-	8	5.5	27	19.9					17	17
	-	-	-	-	16	11.0	3	2.2						
	-	-	-	-	116	79.5	100	73.5						
	-	-	-	-	6	4.1	6	4.4						
For each of the following report format areas, please indicate the extent to which you believe data requested by the DoD Program Office is excessive to the DoD Program Office's needs: • Format 1 - CWBS levels Extremely Somewhat Not No response	-	-	-	-	-	-	6	4.4						19
	-	-	-	-	-	-	30	22.1						
	-	-	-	-	-	-	97	71.3						
	-	-	-	-	-	-	3	2.2						

**C/SCSC SURVEY
TABULATION & COMPARISON OF RESPONSES**

ISSUE/QUESTIONS	PROGRAM MANAGERS				BUSINESS MANAGERS				ANALYSIS REPORT PARA. NO.	QUESTION			NUMBER	
	Government		Contractor		Government		Contractor			GPM	CPM	GSM	CSM	
	No.	%	No.	%	No.	%	No.	%						
● Format 2 - Organization levels														
Extremely	-	-	-	-	-	-	4	2.9						
Somewhat	-	-	-	-	-	-	20	14.7						
Not	-	-	-	-	-	-	106	77.9						
No response	-	-	-	-	-	-	6	4.4						
● Format 3 - Baseline information														
Extremely	-	-	-	-	-	-	5	3.7						
Somewhat	-	-	-	-	-	-	20	14.7						
Not	-	-	-	-	-	-	103	75.7						
No response	-	-	-	-	-	-	8	5.9						
● Format 4 - Manpower information														
Extremely	-	-	-	-	-	-	8	5.9						
Somewhat	-	-	-	-	-	-	21	15.4						
Not	-	-	-	-	-	-	97	71.3						
No response	-	-	-	-	-	-	10	7.4						
● Format 5 - Problem analysis														
Extremely	-	-	-	-	-	-	11	8.1						
Somewhat	-	-	-	-	-	-	46	33.8						
Not	-	-	-	-	-	-	74	54.4						
No response	-	-	-	-	-	-	5	3.7						

C/SCSC SURVEY
TABULATION & COMPARISON OF RESPONSES

ISSUE/QUESTIONS	PROGRAM MANAGERS				BUSINESS MANAGERS				ANALYSIS REPORT PARA. NO.	QUESTION			NUMBER
	Government		Contractor		Government		Contractor			GPM	CPM	CBM	
	No.	%	No.	%	No.	%	No.	%					
In your opinion, could the number of pages in the Cost Performance Reports you receive be reduced without hampering your ability to manage the contract?	-	-	-	-	31	21.0	-	-					19
	-	-	-	-	115	79.0	-	-					
Are all or some of the pages that could be eliminated submitted solely at the contractor's choice (e.g. internal computer printouts in lieu of summary data, etc.)?	-	-	-	-	6	20.0	-	-					20
	-	-	-	-	14	47.0	-	-					
	-	-	-	-	10	33.0	-	-					
For the pages that are <u>not</u> submitted solely at the contractor's choice, please give your rough estimate of the percentage of pages that could be reduced.	-	-	-	-	6	25.0	-	-					21
	-	-	-	-	4	17.0	-	-					

C/SCSC SURVEY
TABULATION & COMPARISON OF RESPONSES

ISSUE/QUESTIONS	PROGRAM MANAGERS						BUSINESS MANAGERS						ANALYSIS REPORT PARA. NO.	QUESTION			NUMBER	
	Government			Contractor			Government			Contractor				GPM	CPM	GBM	CBM	
	No.	%	No.	%	No.	%	No.	%										
• 11 - 20 percent	-	-	-	-	-	-	6	25.0	-	-	-	-						
• 21 - 30 percent	-	-	-	-	-	-	3	12.5	-	-	-	-						
• 31 - 40 percent	-	-	-	-	-	-	1	4.0	-	-	-	-						
• 41 - 50 percent	-	-	-	-	-	-	3	12.5	-	-	-	-						
• 51 - 75 percent	-	-	-	-	-	-	1	4.0	-	-	-	-						
• Over 75 percent	-	-	-	-	-	-	0	0	-	-	-	-						
<u>Internal Reports</u>														6.3.2			20	
In your opinion, could the number of pages of internal reports generated each month from your C/SCSC-accepted system be reduced without hampering your ability to manage the contract?																		
• Yes	-	-	-	-	-	-	-	-	-	-	87	65.0						
• No	-	-	-	-	-	-	-	-	-	-	47	35.0						
Please give your rough estimate on the percentage of pages that could be eliminated																	21	
• 1 - 5 percent	-	-	-	-	-	-	-	-	-	-	5	6.0						
• 6 - 10 percent	-	-	-	-	-	-	-	-	-	-	8	8.5						
• 11 - 20 percent	-	-	-	-	-	-	-	-	-	-	26	30.0						
• 21 - 30 percent	-	-	-	-	-	-	-	-	-	-	28	32.2						

C/SCSC SURVEY
TABULATION & COMPARISON OF RESPONSES

ISSUE/QUESTIONS	PROGRAM MANAGERS				BUSINESS MANAGERS				ANALYSIS REPORT PARA. NO.	QUESTION			NUMBER	
	Government		Contractor		Government		Contractor			GPM	CPM	GBM	CBM	
	No.	%	No.	%	No.	%	No.	%						
<ul style="list-style-type: none">● 31 - 40 percent● 41 - 50 percent● 51 - 75 percent● Over 75 percent● No response	-	-	-	-	-	-	1	1.1						
	-	-	-	-	-	-	8	9.5						
	-	-	-	-	-	-	4	4.6						
	-	-	-	-	-	-	4	4.6						
	-	-	-	-	-	-	3	3.4						
<u>Timeliness of CPRs</u> Cost Performance Reports are received on a sufficiently timely basis so as to be useful to the Program Office in determining cost and/or schedule status: The Cost Performance Report is received on a sufficiently timely basis so as to be useful to the Program Office in determining cost and/or schedule status:									6.3.3	15			30	
<ul style="list-style-type: none">● Agree strongly● Agree somewhat● Disagree somewhat● Disagree strongly● Neither agree nor disagree● No response	16	14.4	-	-	27	18.5	-	-						
	32	28.8	-	-	57	39.0	-	-						
	35	31.5	-	-	29	19.9	-	-						
	26	23.4	-	-	22	15.1	-	-						
	2	1.8	-	-	2	1.4	-	-						
	-	-	-	-	9	6.1	-	-						

C/SCSC SURVEY
TABULATION & COMPARISON OF RESPONSES

ISSUE/QUESTIONS	PROGRAM MANAGERS				BUSINESS MANAGERS				ANALYSIS REPORT PARA. NO.	QUESTION			NUMBER	
	Government		Contractor		Government		Contractor			GPM	CPM	GBM	CBM	
	No.	%	No.	%	No.	%	No.	%						
Approximately how many calendar weeks after the close of the contractor's reporting period are Cost Performance Reports received by the Program Office?													22	
Approximately how many calendar weeks after the close of your monthly reporting period does your company forward Cost Performance Reports to the government?														25
• Less than 1 week	-	-	-	-	1	0.7	0	0						
• At least 1 week but less than 2	-	-	-	-	6	4.1	1	0.7						
• At least 2 weeks but less than 3	-	-	-	-	10	6.8	30	22.1						
• At least 3 weeks but less than 4	-	-	-	-	53	36.3	73	53.7						
• At least 4 weeks but less than 5	-	-	-	-	46	31.5	26	19.1						
• 5 weeks or more	-	-	-	-	29	19.9	44	4.4						
• No response	-	-	-	-	1	0.7	-	-						

**C/SCSC SURVEY
TABULATION & COMPARISON OF RESPONSES**

ISSUE/QUESTIONS	PROGRAM MANAGERS				BUSINESS MANAGERS				ANALYSIS REPORT PARA. NO.	QUESTION			NUMBER	
	Government		Contractor		Government		Contractor			GPM	CPM	GBM	CBM	
	No.	%	No.	%	No.	%	No.	%						
<u>Timeliness of Internal Reports</u> C/SCSC-driven internal cost and schedule reports are received on a sufficiently timely basis so as to be useful to your Program Office in determining cost and/or schedule status. • Agree strongly • Agree somewhat • Disagree somewhat • Disagree strongly • Neither agree nor disagree	-	-	30	21.3	-	-	-	-	6.3.4	19			24	
	-	-	72	51.1	-	-	-	-						
	-	-	21	14.9	-	-	-	-						
	-	-	16	11.3	-	-	-	-						
	-	-	2	1.4	-	-	-	-						
Approximately how many calendar weeks after the close of your monthly reporting period does your company provide C/SCSC-related reports to your Cost Account Managers? • Less than 1 weeks • At least 1 weeks but less than 2 • At least 2 weeks but less than 3 • At least 3 weeks but less than 4	-	-	-	-	-	-	-	33	24.3					
	-	-	-	-	-	-	-	18	50.0					
	-	-	-	-	-	-	-	22	16.2					
	-	-	-	-	-	-	-	11	8.1					
	-	-	-	-	-	-	-	-	-					

C/SCSC SURVEY
TABULATION & COMPARISON OF RESPONSES

ISSUE/QUESTIONS	PROGRAM MANAGERS				BUSINESS MANAGERS				ANALYSIS REPORT PARA. NO.	QUESTION			NUMBER	
	Government		Contractor		Government		Contractor			GPM	CPM	GBM	CBM	
	No.	%	No.	%	No.	%	No.	%						
• 4 weeks or more	-	-	-	-	-	-	-	1	0.7					
• No response	-	-	-	-	-	-	-	1	0.7					
C/SCSC-driven internal cost and schedule reports are received on a sufficiently timely basis so as to be useful to your Program Office in determining cost and/or schedule status.														29
• Agree strongly	-	-	-	-	-	-	-	43	31.6					
• Agree somewhat	-	-	-	-	-	-	-	57	41.9					
• Disagree somewhat	-	-	-	-	-	-	-	25	18.4					
• Disagree strongly	-	-	-	-	-	-	-	10	7.4					
• Neither agree nor disagree	-	-	-	-	-	-	-	1	0.7					
<u>Use of CPRs</u>										6.3.5			8	
How often do you personally review the cost and schedule status of your contract(s) based on Cost Performance Reports (CPRs) or data derived from CPRs?														
• More often than monthly	19	17.1												
• Monthly	76	68.5												
• Bimonthly	7	6.3												
• Quarterly	5	4.5												
• Less often than quarterly	3	2.7												
• Never	1	0.9												

C/SCSC SURVEY
TABULATION & COMPARISON OF RESPONSES

ISSUE/QUESTIONS	PROGRAM MANAGERS				BUSINESS MANAGERS				ANALYSIS REPORT PARA. NO.	QUESTION			NUMBER	
	Government		Contractor		Government		Contractor			GPM	CPM	GBM	CBM	
	No.	%	No.	%	No.	%	No.	%						
<p>Which of the statements below best characterize the extent to which the Program Office routinely reviews and analyzes the CPRs received each month?</p> <ul style="list-style-type: none">• We review and/or analyze the report in its entirety• We review and/or analyze only certain Formats• We review and/or analyze only those portions of the report where a variance threshold has been exceeded• We do not review and/or analyze the reports• No response	-	-	-	-	107	73.3	-	-					18	
	-	-	-	-	29	19.9								
	-	-	-	-	6	4.1	-	-						
	-	-	-	-	2	1.4	-	-						
	-	-	-	-	2	1.4	-	-						
<p>In your opinion, how effectively does the DoD Program Office to which you submit Cost Performance Reports use the data?</p> <ul style="list-style-type: none">• Very effectively• Somewhat effectively• Not at all effectively• No opinion	-	-	-	-	-	-	19	14.0						
	-	-	-	-	-	-	73	53.7						
	-	-	-	-	-	-	13	9.6						
	-	-	-	-	-	-	31	22.8						
														18

**C/SCSC SURVEY
TABULATION & COMPARISON OF RESPONSES**

ISSUE/QUESTIONS	PROGRAM MANAGERS				BUSINESS MANAGERS				ANALYSIS REPORT PARA. NO.	QUESTION			NUMBER	
	Government		Contractor		Government		Contractor			GPM	CPM	GBM		CBM
	No.	%	No.	%	No.	%	No.	%						
Do you regularly use other re- ports or other means in lieu of using Cost Performance Reports (CPRs) or data derived from CPRs in order to determine the cost and schedule status of your contract(s)?	47	42.3	-	-	-	-	-	-		6				
	63	56.8	-	-	-	-	-	-						
	1	0.9	-	-	-	-	-	-						
How often do you use informa- tion or data derived from CPRs in either briefings or written reports to higher headquarters on the cost and schedule status of your program?	9	8.1	-	-	-	-	-	-		9				
	40	36.0	-	-	-	-	-	-						
	10	9.0	-	-	-	-	-	-						
	35	31.5	-	-	-	-	-	-						
	11	9.9	-	-	-	-	-	-						
	5	4.5	-	-	-	-	-	-						
	1	0.9	-	-	-	-	-	-						
On average, how many calendar weeks elapse from the time Cost Performance Reports are received by the Program Office until re- views and analyses are completed within the Program Office?													23	

**C/SCSC SURVEY
TABULATION & COMPARISON OF RESPONSES**

ISSUE/QUESTIONS	PROGRAM MANAGERS				BUSINESS MANAGERS				ANALYSIS REPORT PARA. NO.	QUESTION			NUMBER	
	Government		Contractor		Government		Contractor			GPM	CPM	GBM	CBM	
	No.	%	No.	%	No.	%	No.	%						
• Less than 1 week	-	-	-	-	27	18.5	-	-						
• At least 1 week but less than 2	-	-	-	-	67	45.9	-	-						
• At least 2 weeks but less than 3	-	-	-	-	30	20.5	-	-						
• At least 3 weeks but less than 4	-	-	-	-	11	7.5	-	-						
• At least 4 weeks but less than 5	-	-	-	-	4	2.7	-	-						
• 5 weeks or more	-	-	-	-	7	4.8	-	-						
Approximately how many Program Office man-days (include all Program Office personnel and contracted support, if any) on average are spent per month collecting, reviewing, analyzing and summarizing information contained in contractor Cost Performance Reports?												24		
• Less than 1	-	-	-	-	6	4.1	-	-						
• 1 - 4	-	-	-	-	59	40.4	-	-						
• 5 - 9	-	-	-	-	47	25.3	-	-						
• 10 - 14	-	-	-	-	27	13.5	-	-						
• 15 - 19	-	-	-	-	6	2.7	-	-						
• 20 - 24	-	-	-	-	2	1.4	-	-						
• 25 - 29	-	-	-	-	1	0.7	-	-						
• 30 or more	-	-	-	-	9	6.2	-	-						
• No response	-	-	-	-	1	0.7	-	-						

**C/SCSC SURVEY
TABULATION & COMPARISON OF RESPONSES**

ISSUE/QUESTIONS	PROGRAM MANAGERS				BUSINESS MANAGERS				ANALYSIS REPORT PARA. NO.	QUESTION			NUMBER	
	Government		Contractor		Government		Contractor			GPM	CPM	GBM	CBM	
	No.	%	No.	%	No.	%	No.	%						
Use of Internal Reports How often do you personally review reports of any type either generated directly by your C/SCSC-accepted system or derived from your system? ● Daily ● Weekly ● Biweekly ● Monthly ● Quarterly ● Less often than quarterly ● Never	-	-	5	3.5	-	-	-	-	6.3.6		8			
	-	-	65	46.1	-	-	-	-						
	-	-	15	10.6	-	-	-	-						
	-	-	55	39.0	-	-	-	-						
	-	-	1	0.7	-	-	-	-						
	-	-	0	0	-	-	-	-						
	-	-	0	0	-	-	-	-						
	-	-												
	-	-												
	-	-												
How often does your company Program Manager personally review reports of any type either generated directly by your C/SCSC-accepted system or derived from your system? ● Daily ● Weekly ● Biweekly ● Monthly ● Quarterly ● Less often than quarterly ● Never	-	-	-	-	-	-	-	-					23	
	-	-	-	-	-	-	-	-						
	-	-	-	-	-	-	-	-						
	-	-	-	-	-	-	-	-						
	-	-	-	-	-	-	-	-						
	-	-	-	-	-	-	-	-						
	-	-	-	-	-	-	-	-						
	-	-	-	-	-	-	-	-						
	-	-	-	-	-	-	-	-						
	-	-	-	-	-	-	-	-						

C/SCSC SUI
TABULATION & COMPARISON OF RESPONSES

ISSUE/QUESTIONS	PROGRAM MANAGERS				BUSINESS MANAGERS				ANALYSIS REPORT PARA. NO.	QUESTION			NUMBER	
	Government		Contractor		Government		Contractor			GPM	CPM	GBM	CBM	
	No.	%	No.	%	No.	%	No.	%						
Do you regularly use other reports or other means in lieu of using C/SCSC-driven internal cost and schedule reports in order to determine cost and schedule status of your contract(s)?	-	-	76	53.9	-	-	-	-			6			
	-	-	65	46.1	-	-	-	-						
Does your company have an in-house recurring training program for managers on how to use internal reports from your C/SCSC-accepted system?	-	-	-	-	-	-	-	96	70.6					36
	-	-	-	-	-	-	-	39	28.7					
	-	-	-	-	-	-	-	1	0.7					

C/SCSC SURVEY
TABULATION & COMPARISON OF RESPONSES

ISSUE/QUESTIONS	PROGRAM MANAGERS				BUSINESS MANAGERS				ANALYSIS REPORT PARA. NO.	QUESTION			NUMBER	
	Government		Contractor		Government		Contractor			GPM	CPM	GBM		CBM
	No.	%	No.	%	No.	%	No.	%						
7.0 SURVEILLANCE									7.0					
Effectiveness									7.3.1					
Non-Program Office plant representatives such as DCAS, DCAA, NAVPROs, etc., do a reasonably good job of monitoring the contractor's C/SCSC-accepted system to ensure that it is functioning effectively.										17		32		
• Agree strongly	18	16.2	-	-	-	41	28.4	-	-					
• Agree somewhat	57	51.4	-	-	-	64	44.4	-	-					
• Disagree somewhat	17	15.3	-	-	-	20	13.8	-	-					
• Disagree strongly	12	10.8	-	-	-	12	8.3	-	-					
• Neither agree nor disagree	7	6.3	-	-	-	7	4.8	-	-					
Frequency									7.3.2				35	
To the best of your knowledge, how frequently does the government C/SCSC Surveillance Monitor have contact with your company?														
• Daily	-	-	-	-	-	-	-	23	17.1					
• Weekly	-	-	-	-	-	-	-	31	23.1					
• Monthly	-	-	-	-	-	-	-	48	35.8					

C/SCSC SURVEY
TABULATION & COMPARISON OF RESPONSES

ISSUE/QUESTIONS	PROGRAM MANAGERS						BUSINESS MANAGERS						ANALYSIS REPORT PARA. NO.	QUESTION			NUMBER	
	Government			Contractor			Government			Contractor				GPM	CPM	GBM	CBM	
	No.	%		No.	%		No.	%		No.	%							
● Less often than monthly	-	-	-	-	-	-	-	-	-	-	13	9.7						
● Don't know	-	-	-	-	-	-	-	-	-	-	19	14.1						
<u>Expertise & Priority</u> The in-plant government people do not have much, if any, expertise in C/SCSC.													7.3.3				28	
● Agree strongly	-	-	-	-	-	-	-	-	-	-	16	11.8						
● Agree somewhat	-	-	-	-	-	-	-	-	-	-	45	33.3						
● Disagree somewhat	-	-	-	-	-	-	-	-	-	-	36	26.6						
● Disagree strongly	-	-	-	-	-	-	-	-	-	-	31	23.0						
● Neither agree nor disagree	-	-	-	-	-	-	-	-	-	-	7	5.2						
The in-plant government people such as DCAS or AFPROs have a variety of responsibilities, with C/SCSC usually being very low on their priority list.																	27	
● Agree strongly	-	-	-	-	-	-	-	-	-	-	17	12.8						
● Agree somewhat	-	-	-	-	-	-	-	-	-	-	46	33.4						
● Disagree somewhat	-	-	-	-	-	-	-	-	-	-	33	24.2						
● Disagree strongly	-	-	-	-	-	-	-	-	-	-	32	24.5						
● Neither agree nor disagree	-	-	-	-	-	-	-	-	-	-	7	5.1						

**C/SCSC SURVEY
TABULATION & COMPARISON OF RESPONSES**

POPULATION DESCRIPTORS	PROGRAM MANAGERS				BUSINESS MANAGERS				ANALYSIS REPORT PARA. NO.	QUESTION			NUMBER	
	Government		Contractor		Government		Contractor			GPM	CPM	GSM	CSM	
	No.	%	No.	%	No.	%	No.	%						
Please indicate the Department responsible for this program. ● Army ● Navy ● Air Force	29*	26.1	37	26.2			36	24.7	30	22.0	1	1	2	2
	32	28.8	47	33.3			43	29.5	47	34.6				
	50	45.1	57	40.4			67	45.8	59	43.4				
Please indicate the phase of this program. ● Research and Development ● Production ● Other ● No response	56	50.5	67	47.5			-	-	-	-	2	2		
	48	43.2	70	49.6			-	-	-	-				
	6	5.4	4	2.8			-	-	-	-				
	1	0.9	-	-			-	-	-	-				
Indicate the predominant type of work being done under this contract. ● Advanced Development ● Engineering Development ● Low Rate Production ● Production ● Other													3	3
	-	-	-	-			14	9.6	10	7.4				
	-	-	-	-			69	47.3	62	45.6				
	-	-	-	-			11	7.5	16	11.8				
	-	-	-	-			43	29.5	46	33.8				
	-	-	-	-			9	6.2	2	1.5				
Please indicate the category of weapon/equipment system which best describes this program. ● Aircraft ● Electronics ● Missile ● Ordnance											3	3	4	4
	23	20.7	14	9.9			26	17.8	13	9.6				
	23	20.7	45	31.9			37	25.3	44	32.4				
	37	33.3	41	29.1			46	31.5	38	27.9				
	8	7.2	8	5.7			8	5.5	9	6.6				

* NC Although government program manager questionnaires were mailed to 28 Army program managers, 29 of the returned government program manager questionnaires indicated that the department responsible for the respondent's program was the Army.

C/SCSC SURVEY
TABULATION & COMPARISON OF RESPONSES

POPULATION DESCRIPTORS	PROGRAM MANAGERS						BUSINESS MANAGERS						ANALYSIS REPORT PARA. NO.	QUESTION			NUMBER	
	Government			Contractor			Government			Contractor				GPM	CPM	GBM	CBM	
	No.	%	No.	%	No.	%	No.	%	No.	%								
<ul style="list-style-type: none">● Ship● Space● Surface Vehicle● Other● No response	4	3.6	11	7.8	7	4.8	11	8.1										
	6	5.4	9	6.4	8	5.5	9	6.6										
	4	3.6	10	7.1	5	3.4	5	3.7										
	5	4.5	3	2.1	9	6.2	7	5.1										
	1	0.9	-	-	-	-	-	-										
What will be the approximate total cost of the program through final production?																		
● Less than \$24M	0	0	0	0	-	-	-	-										
● At least \$25M but less than \$100M	7	6.3	16	11.3	-	-	-	-										
● At least \$100M but less than \$500M	19	17.1	38	27.0	-	-	-	-										
● At least \$500M but less than \$1B	10	9.0	22	15.6	-	-	-	-										
● At least \$1B but less than \$5B	41	36.9	47	33.3	-	-	-	-										
● \$5B or more	33	29.7	18	12.8	-	-	-	-										
● No response	1	0.9	-	-	-	-	-	-										
What is the approximate total dollar value of this contract?																		
● Under \$10M	-	-	-	-	1	0.7	1	0.7								5	5	
● At least \$10M but less than \$25M	-	-	-	-	9	6.2	10	7.4										
● At least \$25M but less than \$40M	-	-	-	-	11	7.5	11	8.1										

**C/SCSC SURVEY
TABULATION & COMPARISON OF RESPONSES**

POPULATION DESCRIPTORS	PROGRAM MANAGERS						BUSINESS MANAGERS						ANALYSIS REPORT PARA. NO.	QUESTION			NUMBER	
	Government			Contractor			Government			Contractor				GPM	CPM	GBM	CBM	
	No.	%	No.	%	No.	%	No.	%										
• At least \$40M but less than \$100M	-	-	-	-	38	26.0	29	21.3										
• At least \$100M but less than \$160M	-	-	-	-	26	12.8	17	12.5										
• At least \$160M but less than \$500M	-	-	-	-	46	31.5	51	37.5										
• \$500M or more	-	-	-	-	14	9.6	17	12.5										
• No response	-	-	-	-	1	0.7	-	-										
What type of contract is the one you have selected?																6	6	
• CPFF	-	-	-	-	11	7.5	13	9.6										
• CPAF	-	-	-	-	16	11.0	18	13.2										
• CPIF	-	-	-	-	41	28.1	33	24.3										
• FPI	-	-	-	-	64	43.8	66	48.6										
• Other	-	-	-	-	13	8.9	6	4.4										
• No response	-	-	-	-	1	0.7	-	-										
What is the duration of the contract?																7	7	
• Less than 12 months	-	-	-	-	0	0	0	0										
• At least 12 months but less than 24 months	-	-	-	-	18	5.5	3	2.2										
• At least 24 months but less than 36 months	-	-	-	-	27	18.5	27	19.9										

**C/SCSC SURVEY
TABULATION & COMPARISON OF RESPONSES**

POPULATION DESCRIPTORS	PROGRAM MANAGERS						BUSINESS MANAGERS				ANALYSIS REPORT PARA. NO.	QUESTION			NUMBER	
	Government			Contractor			Government		Contractor			GPM	CPM	GBM	CBM	
	No.	%	No.	%	No.	%	No.	%								
• At least 36 months but less than 48 months	-	-	-	-	42	28.8	32	23.5								
• At least 48 months but less than 60 months	-	-	-	-	32	21.9	44	32.4								
• 60 months or more	-	-	-	-	37	25.3	30	22.1								
Was the contract definitized at the time of contract award?														8	8	
• Yes	-	-	-	-	99	67.8	86	63.2								
• No	-	-	-	-	46	31.5	49	36.0								
• No response	-	-	-	-	1	0.7	1	0.8								
IF "NO"														9	9	
Approximately how many months elapsed from contract award to contract definitization?																
• Less than 3 months	-	-	-	-	5	10.4	3	6.1								
• At least 3 months but less than 6	-	-	-	-	15	32.6	6	12.2								
• At least 6 months but less than 9	-	-	-	-	11	23.9	13	26.5								
• At least 9 months but less than 12	-	-	-	-	2	4.3	8	16.3								
• At least 12 months but less than 15	-	-	-	-	7	15.2	6	12.2								

C/SCSC SURVEY
TABULATION & COMPARISON OF RESPONSES

POPULATION DESCRIPTORS	PROGRAM MANAGERS						BUSINESS MANAGERS						ANALYSIS REPORT PARA. NO.	QUESTION			NUMBER	
	Government			Contractor			Government			Contractor				GPM	CPM	GBM	CBM	
	No.	%		No.	%		No.	%		No.	%							
<ul style="list-style-type: none">At least 15 months but less than 1818 months or moreNo response	-	-	-	-	-	-	2	4.3	4	8.2								
	-	-	-	-	-	-	3	6.5	8	16.3								
	-	-	-	-	-	-	1	2.2	1	2.0								
On the scale below, please circle <u>one</u> number for <u>each</u> item to indicate how knowledgeable you personally are about the contents of each of the following Cost Performance (CPR) Formats:														18	21			
1 = Not knowledgeable																		
10 = Very knowledgeable																		
<ul style="list-style-type: none">Format 1 - CWBS levels	1	0.9	2	1.4			-	-	-	-	-	-	-					
	2	1.8	1	0.7			-	-	-	-	-	-	-					
	3	1.8	4	2.8			-	-	-	-	-	-	-					
	4	1.8	1	0.7			-	-	-	-	-	-	-					
	5	5.4	2	1.4			-	-	-	-	-	-	-					
	6	7.2	3	2.1			-	-	-	-	-	-	-					
	7	16.2	13	9.2			-	-	-	-	-	-	-					
	8	17.1	34	24.1			-	-	-	-	-	-	-					
	9	19.8	23	16.3			-	-	-	-	-	-	-					
	10	27.0	57	40.4			-	-	-	-	-	-	-					
<ul style="list-style-type: none">Format 2 - Organization levels																		
	1	1.8	3	2.1			-	-	-	-	-	-	-					
	2	0.9	1	0.7			-	-	-	-	-	-	-					
	3	3.6	5	3.5			-	-	-	-	-	-	-					
	4	7.2	2	1.4			-	-	-	-	-	-	-					

C/SCSC SURVEY
TABULATION & COMPARISON OF RESPONSES

POPULATION DESCRIPTORS	PROGRAM MANAGERS				BUSINESS MANAGERS				ANALYSIS REPORT PARA. NO.	QUESTION			NUMBER	
	Government		Contractor		Government		Contractor			GPM	CPM	GBM	CBM	
	No.	%	No.	%	No.	%	No.	%						
● Format 3 Baseline information	5	9	8.1	6	4.3	-	-	-	-					
	6	7	6.3	2	1.4	-	-	-	-					
	7	16	14.4	12	8.5	-	-	-	-					
	8	21	18.9	39	27.7	-	-	-	-					
	9	23	20.7	17	12.1	-	-	-	-					
	10	17	15.3	52	36.9	-	-	-	-					
	1	1	0.9	3	2.1	-	-	-	-					
	2	2	1.8	4	2.8	-	-	-	-					
	3	3	2.7	5	3.5	-	-	-	-					
	4	7	6.3	3	2.1	-	-	-	-					
● Format 4 - Manpower information	5	9	8.1	14	9.9	-	-	-	-					
	6	7	6.3	6	4.3	-	-	-	-					
	7	19	17.1	21	14.9	-	-	-	-					
	8	26	23.4	27	19.1	-	-	-	-					
	9	20	18.0	14	9.4	-	-	-	-					
	10	15	13.5	41	29.1	-	-	-	-					
	1	1	0.9	3	2.1	-	-	-	-					
	2	1	0.9	1	0.7	-	-	-	-					
	3	3	2.7	3	2.1	-	-	-	-					
	4	3	2.7	1	0.7	-	-	-	-					
5	5	4.5	6	4.3	-	-	-	-						
6	6	5.4	4	2.8	-	-	-	-						
7	12	10.8	10	7.1	-	-	-	-						
8	20	18.0	24	17.0	-	-	-	-						
9	32	28.8	32	22.7	-	-	-	-						
10	27	24.3	55	30.0	-	-	-	-						

**C/SCSC SURVEY
TABULATION & COMPARISON OF RESPONSES**

POPULATION DESCRIPTORS	PROGRAM MANAGERS				BUSINESS MANAGERS				ANALYSIS REPORT PARA. NO.	QUESTION			NUMBER	
	Government		Contractor		Government		Contractor			GPM	CPM	GBM	CBM	
	No.	%	No.	%	No.	%	No.	%						
● Format 5 - Problem analysis	1	0.9	3	2.1	-	-	-	-						
1	1	0.9	1	0.7	-	-	-	-						
2	3	2.7	3	2.1	-	-	-	-						
3	3	2.7	1	0.7	-	-	-	-						
4	5	4.5	6	4.3	-	-	-	-						
5	6	5.4	4	2.8	-	-	-	-						
6	12	10.8	10	7.1	-	-	-	-						
7	20	18.0	24	17.0	-	-	-	-						
8	32	28.8	32	22.7	-	-	-	-						
9	27	24.3	55	39.0	-	-	-	-						
10														
In what year did this contractor receive official notification that the C/SCSC requirement had been satisfactorily met for this contract?												13		
In what year was this notification received?														15
● 1983	-	-	-	-	39	26.7	38	27.9						
● 1982	-	-	-	-	34	23.3	23	16.9						
● 1981	-	-	-	-	25	17.1	29	21.3						
● 1980	-	-	-	-	17	11.6	12	8.8						
● 1979	-	-	-	-	2	1.4	6	4.4						
● 1978	-	-	-	-	5	3.4	3	2.2						
● 1977	-	-	-	-	4	2.7	2	1.5						
● 1976	-	-	-	-	1	0.7	5	3.7						
● 1975 or earlier	-	-	-	-	4	2.7	1	0.7						

**C/SCSC SURVEY
TABULATION & COMPARISON OF RESPONSES**

POPULATION DESCRIPTORS	PROGRAM MANAGERS						BUSINESS MANAGERS						ANALYSIS REPORT PARA. NO.	QUESTION			NUMBER	
	Government			Contractor			Government			Contractor				GPM	CPM	GBM	CBM	
	No.	%	No.	%	No.	%	No.	%										
How long have you been in your current job?														19	24			
• Less than one year	23	20.7	14	9.9	-	-	-	-	-	-	-	-	-					
• 1 to 3 years	56	51.4	36	25.5	-	-	-	-	-	-	-	-	-					
• More than 3 years	31	27.9	90	64.6	-	-	-	-	-	-	-	-	-					
Did you have a previous job which provided you with some familiarity with C/SCSC?														20	25			
• Yes	65	58.6	106	75.2	-	-	-	-	-	-	-	-	-					
• No	46	41.4	34	24.8	-	-	-	-	-	-	-	-	-					
What C/SCSC training, if any, have you had?														21	26			
• C/SCSC-related courses at DSMC, AFIT or AMETA	58	52.3	10	7.1	-	-	-	-	-	-	-	-	-					
• Other formal training	23	20.0	58	41.1	-	-	-	-	-	-	-	-	-					
• In-house or on-the-job training	79	71.2	125	88.7	-	-	-	-	-	-	-	-	-					
• None	5	4.5	4	2.8	-	-	-	-	-	-	-	-	-					
(multiple answers)																		

C/SCSC SURVEY
TABULATION & COMPARISON OF RESPONSES

POPULATION DESCRIPTORS	PROGRAM MANAGERS				BUSINESS MANAGERS				ANALYSIS REPORT PARA. NO.	QUESTION			NUMBER	
	Government		Contractor		Government		Contractor			GPM	CPM	GBM	CBM	
	No.	%	No.	%	No.	%	No.	%						
The contract selected uses a C/SCSC-compliant system which was accepted by means of ● Demonstration Review ● Subsequent Application Review (SAR) ● No Response	-	-	-	-	50	34.2	33	24.3				1	1	
	-	-	-	-	91	62.	99	72.8						
	-	-	-	-	5	3.4	4	2.9						

APPENDIX 3

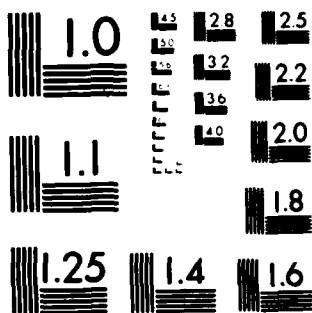
RESPONDENT PROFILES

The four (4) questionnaires contained questions whose answers provided profiles of the respondents. These questions included, for example, responsible military service, phase of program, category of weapon system, etc. Some of these questions also were useful in cross-tabulations with responses to other questions. A complete tabulation of responses is included in Appendix 2. The following is a summary which may provide the reader with useful profiles of the four (4) respondent populations.

Respondent tabulations show the following:

- More of the programs/contracts were in research and development than in production.
- Approximately 70% to 75% of the programs/contracts were in the aircraft, electronics or missile weapons systems categories.
- Two-thirds (67%) of the government program managers estimated the approximate cost of their programs as \$1 billion or more. Approximately 85% of the contracts with the C/SCSC requirement had a total dollar value of at least \$40 million.
- Approximately the same percentage of contracts with C/SCSC were cost-plus and fixed-price incentive.
- Approximately one-third of the contracts with C/SCSC were not definitized at contract award.
- Of those contracts not definitized at contract award, approximately 60% to 70% were reported to have been definitized within 12 months.
- Government and contractor program managers were asked to indicate the extent of their personal knowledge of five (5) CPR formats. Overall, contractor managers rated themselves as more knowledgeable than government managers rated themselves.
- Contractors for approximately two-thirds of the contracts responding to the survey received their notification in 1981, 1982 or 1983 that they had met the C/SCSC requirement for their contract.
- Most government program managers (71%) have been in their current jobs for 3 years or less; while the majority of contractor program managers (64%) have been in their current jobs for more than 3 years.

- Most contractor program managers (75%) and most government program managers (59%) had previous jobs which provided them some familiarity with C/SCSC.
- The majority of government program managers (52%) had received C/SCSC training at DOD training courses (Defense Systems Management College, Air Force Institute of Technology or Army Management Engineering Training Agency). Most contractor program managers (89%) received their C/SCSC training from in-house and on-the-job opportunities.



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A